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ABSTRACT

Testimony and/or prepared statements are provided in these hearings which focused on the American Defense Education Act (ADEA). Individuals participating in the hearings included: Mark Andrew; Christopher J. Dodd; Mary H. Futrell; Gary Hart; Patrick Leahy; Richard Long; Peg Portscheller; and Naida Townsend. Under ADEA, local school districts develop and implement programs in elementary and secondary schools to improve instruction and student achievement in mathematics, science, foreign languages, communications skills, and technology. In addition, the bill: (1) encourages institutions of higher education to coordinate efforts with local school districts for the training and retraining of teachers through workshops, summer institutes, and in-service training; (2) authorizes funds to support research and development in effective teaching and learning techniques in mathematics, science, foreign languages, and technological training; (3) encourages excellence in education by providing local school districts with incentives to develop quality education programs; and (4) encourages partnerships between the federal government and local school districts in initiating programs between parents, teachers, and business leaders in establishing procedures for program evaluation, and between institutions of higher education and local school districts in developing teacher training programs. (JN)

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AMERICAN DEFENSE EDUCATION ACT

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HEARING

BEFORE THE

SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

S. 177

TO AUTHORIZE A NATIONAL PROGRAM OF IMPROVING THE QUALITY OF EDUCATION

JULY 25, 1985

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AMERICAN DEFENSE EDUCATION ACT

THURSDAY, JULY 25, 1985

U.S. SENATE,
SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES,
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 2 p.m., in room SD-562, Dirksen Senate Office Building, Senator Robert T. Stafford (chairman of the subcommittee) presiding.

Present: Senators Stafford, Dodd, and Simon.

Also present: Senators Andrews, Hart, Leahy, and Burdick.

OPENING STATEMENT OF SENATOR STAFFORD

Senator STAFFORD. The committee will please come to order.

I want the record to reflect that Senator Claiborne Pell, so valuable a member of this subcommittee and its ranking minority member, is unable to be here because the Conferees on Foreign Aid are meeting this afternoon at a conflicting time.

Today, the Subcommittee on Education, Arts and Humanities meets to discuss the American Defense Education Act, a bill which forces us to reexamine the needs of our Nation's public schools.

It is the belief of this Senator that a major responsibility of the Federal Government is to contribute to educational progress. It has been only 2 years since the National Commission on Excellence in Education, established by our former Secretary of Education, Ted Bell, concluded that, quoting, "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and as a people."

Since this report, the issue of educational quality has come to the forefront of our national agenda. Certainly, the Commission's report, "A Nation At Risk", did not provide answers for all problems concerning elementary and secondary education, but at least it asked the right questions.

We cannot lose the incentive which "A Nation At Risk" is responsible for. The momentum must be preserved. I believe that the purpose of our public schools is to provide our Nation's students the necessary basic skills and learning experiences that enable them to lead fulfilling lives. Our Nation's schools are charged with the special task of providing opportunities for such learning to all our Nation's students, including those with economic, physical or other disadvantages have in the past prevented access to a valuable educational experience.

The Federal Government has a special responsibility to provide assistance and promote access. I look forward to hearing the testi-

mony of our witnesses today, and I will say I am especially pleased to welcome Maida Townsend, our Vermont NEA president, amongst those witnesses.

Senator STAFFORD. We will start by hearing from two very able and distinguished Member of the U.S. Senate and long-time friends of mine, first, Senator Mark Andrews. Senator Andrews, we are very happy that you are here as the leadoff witness.

STATEMENT OF HON. MARK ANDREWS, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

Senator ANDREWS. Thank you, Mr. Chairman.

I appreciate the opportunity to speak before your distinguished subcommittee. Let me point out that as the son of a public school teacher, it is great to be here, but even more importantly, when I look at the backing I have, with Mary Futrell right behind me, the president of the National Education Association; Maida Townsend, who you introduced and who is president of the Vermont Education Association, and of course, Peg Portscheller, who is the newly-elected president of the North Dakota Education Association—most important, of course, to me is Peg—she got elected without any opposition. Bob, you and I should do that well. But with these three distinguished educators behind me, I could not have a better backing this afternoon.

I have three key reasons, Mr. Chairman, for appearing before the Subcommittee on Education today. First, as a major cosponsor of the American Defense Education Act, I am pleased that we have this opportunity for the first time in the Senate to discuss both the details of the ADEA and the challenges confronting our Nation's educational system generally.

Second, I am doubly pleased to be one of two North Dakotans to appear before you this afternoon and to have on the rostrum my colleague, the distinguished senior Senator from North Dakota, Quentin Burdick. You will hear from Peg Portscheller, as I mentioned earlier, who will present testimony joining with your own president and our national president. I might add that Peg is a teacher from Minot, ND, and I know that while she is excited by her new responsibilities, she already misses her students. She is that kind of teacher, Mr. Chairman. We are fortunate that there are teachers such as Peg who realize that improving education must be done not only in the classroom, but in our town halls, our State houses, and here in Congress as well. Her students' loss will be our gain.

Last, Mr. Chairman, and by no means least, my appearance here today gives me the opportunity to publicly praise your work on behalf of America's schoolchildren, college students and adults seeking additional education. It is awfully easy to be an advocate for education when the economy is rosey and the coffers are full. When the coffers are not full, and retrenchment, not advancement, is the rule, it becomes unfashionable sometimes to champion educational projects. I have never heard anyone, however, accuse Senator Bob Stafford of promoting education simply because it is fashionable.

On the contrary, Mr. Chairman, you have fought some pitched battles in recent years against those who would compromise the Federal commitment to education. There are many of us who value your leadership, and I consider myself one of your foot soldiers, ready to serve at any time.

Turning to the subject at hand, there is one important lesson we must carry with us from today's hearing. That is quite simply that this is not just a hearing on the American Defense Education Act. It is a fundamental part of an exhaustive reexamination Congress must make of the American educational system. The first step was taken under Ted Bell's leadership when the National Commission on Excellence in Education issued its report, "A Nation At Risk". That publication set off a flurry of national attention. But there are times, Mr. Chairman, when I wonder if the public concern generated by that report is beginning to fade away much like a prairie fog back home dissipates when exposed to the heat of the morning sun. I hope not.

But if we are to maintain the momentum for educational improvement, we must recognize that the effort needs more than fancy speeches to sustain it; it will need the demonstrable support of the people and Government. And that support must take the form of new ideas, personal effort, and financial commitment. In other words, brains, sweat and money. There simply isn't any substitute.

Brains, we have. I know in meeting with teachers in North Dakota that they are talented professionals who have forsaken the allure of higher salaries to dedicate their lives and skills to our young people. Yet I wonder, given the dismal projections that demand for teachers will exceed the supply by 1 million in the next decade, how many quality people will continue to be willing to make this monetary sacrifice, as well as the ongoing, selfless commitment to our Nation's youth?

Sweat, we have. Again, all of us know of teachers who work long beyond the last school bell has sounded to develop imaginative lesson plans to provoke new ideas among students. Still, when our science classrooms, for instance, lack modern tools of instruction and experimentation, even the most clever and hardworking instructors run out of the ideas and energy to just make do.

Money, we have. Yet I worry that we have allowed our fiscal commitment to education to plateau under the illusion that it is not money which is going to fix our schools. Rather than being an illusion, it is a delusion to think that we can improve education in America without an increased Federal commitment. Remember that education programs are not spending, but are investment programs.

Mr. Chairman, as a member of the Senate Budget Committee, we talk day after day after day about Government spending. But I think we are making a grave error in not taking a look at those programs that are truly Government investment programs. That is what this Nation is all about, and educational programs are clearly investments in the future of this great Nation.

Teachers not only must be paid, they must be well-paid. Physics laboratories, biology classes and vocational schools must begin

using the technologies of the 21st century and not be asked to jerryrig the same old equipment time and again.

This is why our discussion of the American Defense Education Act is both necessary and timely. Certainly, there is much merit to the individual components of the legislation I support.

First, it is targeted to improve specific subject areas. Those subject areas, Mr. Chairman and members of the committee, I submit that are most needed for the future of this country. It focuses on expanded in-service training for teachers already in our schools. Teachers are the infantry in the battle against ignorance, and we should see to it that they have the opportunity to update and expand their skills to fight that foe.

ADEA also provides significant room for local discretion. Just as our chapter 2 law does today, this legislation would enable local school districts, Mr. Chairman, to work out their own solutions to national needs.

And finally, ADEA is result-oriented. It contains incentives and rewards for those schools which demonstrate progress toward the goal of educational improvement.

Apart from the specifics of this legislation, ADEA represents an opportunity for all of us at the Federal level who care about education to begin thinking concretely about where our educational system is going and how the Federal Government can help it along the correct path.

Mr. Chairman, I remember the promise of the National Defense Education Act, enacted a generation ago. You and I were in Congress when we passed the Elementary and Secondary Education Act in 1965, a landmark whose 20th anniversary we are celebrating this year. I witnessed the creation of Public Law 94-142, the Education of All Handicapped Children Act.

These pieces of legislation were more than just words on paper. They were a commitment to our children and to our Nation's future. Furthermore, they have come to represent the generous and effective legacy of the Federal Government's role in education.

I hate to think that we have abandoned that legacy, but there are times when I fear we have.

In recent years, despite some noteable exceptions, we in Congress who value education have had to fight simply to preserve the status quo. I wonder how long we can be satisfied solely with a caretaker's role.

Finally, Mr. Chairman, to any of us who have visited the castles of Europe or the British museum, the suit of armor is a familiar sight. It is a symbol of strength and fortitude. A nation, too, can be like a suit of armor. It can be steel-like and tough. It can present a firm appearance to the outside world. Yet, the suit of armor by itself is nothing but a hunk of metal. It takes a person to make it work. So, too, with a nation. Despite its missiles and tanks, ships and its aircraft, it is a nation's people which determine its quality and ensure that the national fabric is strong.

Whatever legislative vehicle we may someday enact to respond to the new challenges confronting education, let us always keep in mind that it is this investment in the people of America which will best determine our survival as the kind of Nation all others admire.

ADEA is a prime example of just such a necessary investment.

I would hope, Mr. Chairman, that as you and other members of this distinguished subcommittee take a closer look at it and hold further hearings, that you will feel the same way about it and move it out for consideration and ultimate passage.

Thank you very much for the opportunity to appear before you today.

Senator STAFFORD. Thank you very much, Senator Andrews. Your very wise words and excellent statement will obviously carry much weight with the Chairman of this subcommittee and I believe with the membership of this subcommittee. You were kind enough to say some gracious words about the committee's Chairman and the essentially defensive battles we have been involved in in the last 4½ years in the Congress. I want the record to show that in my opinion, those battles would not have been won without your assistance and that you have been a very valuable part of the team in preserving the Federal role in education during these rather difficult times.

So I thank you very much. I do not assume we have any questions, so Senator, we would be glad to have you stay, if your time permits, or knowing that you may be pressed for time and have to be somewhere——

Senator ANDREWS. Oh, I am looking forward to hearing from these three leaders in education, Mr. Chairman. I can only learn.

Thank you very much for your time this afternoon.

Senator STAFFORD. Thank you.

Senator SIMON. we have started, but we will stop here for a moment if you have an opening statement or comments you wish to make.

Senator SIMON. I have no opening statement. I am very pleased to be here, pleased to be a member of your subcommittee, Mr. Chairman.

Senator STAFFORD. Well, I am very happy that you are, and we are glad you are here.

Senator Hart, we would be most pleased to hear from you.

STATEMENT OF HON. GARY HART, A U.S. SENATOR FROM THE STATE OF COLORADO

Senator HART. Mr. Chairman, I have a rather lengthy and detailed statement which, with the permission of the Chair and the subcommittee, I would like to introduce and summarize, if I may.

Senator STAFFORD. Without objection, we will place it in the record as if read, and we would be happy to have you summarize it.

Senator HART. Mr. Chairman I join and wish to underscore the excellent words of our colleague, the Senator from North Dakota, Mr. Andrews, and, along with the other 19 cosponsors of this legislation, a bipartisan group, urge action by the subcommittee on, if not this measure, something very close to it, and would add a word of congratulations to you and other subcommittee members for conducting these hearings once again.

Mr. Chairman, like Senator Andrews, my comments focus on the American Defense Education Act. I had the honor of introducing this legislation in both the 97th and 98th Congresses. As you know,

hearings took place in both the House and the Senate during the last Congress.

This bill was introduced again this session and, as I have indicated, it does have 19 cosponsors.

Now, Mr. Chairman, since the American Defense Education Act was first introduced, Congress passed a measure with a similar aim—to improve math and science education, among other things. But that bill, the Education for Economic Security Act is, in the judgment of this Senator, only a halfway, short-term measure. It does not solve the problems of education in this country. Indeed, no single piece of legislation can.

I think all of us agree we have to do more, and the question is how to do it in the most effective way. If nothing else, the demands of this country's changing economy necessitate a comprehensive long-term measure that will make this Nation's students high achievers in math and science and provide them with the skills that are going to be necessary in a post-industrial economy.

I think most of us are also aware that the jobs of the future, today and tomorrow, will place a high and higher premium on technological and scientific education. Our students must have the skills to fill these jobs to ensure the Nation's economic prosperity in an internationally competitive environment.

The demand for quality and technological education also extends to our military forces. Since being identified with this measure some 5 or 6 years ago, I am asked why the word defense in the title. And I think there are two reasons, Mr. Chairman, one of which our colleague, Senator Andrews, has underscored. More than 25 years ago, facing the challenge of Sputnik, this country did respond by enacting the National Defense Education Act under a Republican President. It was because we understood that we had fallen behind, and we were not keeping pace at that time with the Soviet Union. Today, we are not keeping pace not only with the Soviet Union, but other nations as well—our friends, as well as our potential foes.

In addition, the growing complexity and sophistication of our military technology itself require that our Armed Forces personnel master skills in such areas as computer programming, electronics and advanced communications systems. Those of us who have served on the Armed Services Committee have seen occasional appalling instances where we vote authorization or appropriation of increasingly sophisticated military technology and then discover that our troops in Europe or elsewhere do not have the education necessary to operate and maintain that equipment.

Therefore, I think it is entirely appropriate, if I may say so, that this bill contain the word defense in its title.

But Mr. Chairman, by ensuring that our young people learn the skills of tomorrow, we are doing more than promoting our nation's interest in a competitive world. Young people must learn new technological skills to be prepared to prosper and grow in a changing economy. Only then will they have the abilities to explore and innovate in new areas and gain intellectual fulfillment for themselves and security for this country.

Unfortunately, today our education programs are not providing our young people with adequate skills to meet the challenges of the

changing world. The very dangerous trends in math and science education that I pointed out before the subcommittee in 1982 have not been alleviated; they have only continued and been exacerbated. Recent statistics outlining these trends ought to be alarming to the Congress and the American people.

Scholastic Achievement Test scores have fallen sharply in the last two decades from an average test score in mathematics of 502 in 1963 to 467 in 1983. In 1960 to 1961, 60 percent of our high school students were enrolled in at least one science course. That figure fell to 44 percent in 1981 and 1982.

While we are failing to educate most of our young people in math and science, our international competitors are devoting more attention and more resources to this task. One-half of all high school students in the United States take no mathematics or science beyond the 10th grade. In contrast, the general curriculum in the Soviet Union requires that all young people complete 2 years of calculus, 5 years of physics, 4 years of chemistry, and 5 years of algebra.

Not surprisingly, our inattention to math and science education is matched by a decline in the number of qualified teachers in these areas. The National Science Foundation shows that for the 1982–83 school year, 46 States reported a shortage of chemistry teachers, and 42 States reported a shortage of physics teachers. From all indications, these shortages will continue. They will continue to grow as the baby boom echo begins to expand our enrollment rosters.

Now, this bleak portrait of math and science education in the United States is disturbing and it is dangerous. The scenario demands, it seems to me, an effective national response.

The American Defense Education Act is a comprehensive bill, specifically targeted to improving our youngsters' education in math and science, communications, foreign language, and technology.

Mr. Chairman, I refer you and other members of the subcommittee and the staff to the full text of my testimony for an outline of the four titles of the bill. Let me point out very briefly some of the features of the ADEA that I believe are particularly relevant to the challenges that we are considering.

First, the ADEA encourages the development of programs to improve not only students' technological skills, but also their communication and foreign language skills. Our citizens are going to have to be able to communicate effectively with representatives of foreign nations to negotiate treaties, including arms control treaties, establish trade policies, engage in cultural exchanges, and if I may say so, compete more broadly in the international marketplace.

Second, the ADEA does not create a Federal bureaucracy to implement a vast new program. Instead, the Federal Government acts as a catalyst, the role that I think it should play, to encourage local school districts to develop effective programs. Local initiative and flexibility are stimulated and encouraged, rather than stifled.

And finally, Mr. Chairman, the ADEA encourages partnerships among those who share responsibilities for our children's educations—parents, community leaders, local school districts, the Feder-

al Government, institutions of higher education, as well as the front line soldiers in the battle for education—the teachers.

These partnerships, it seems to me, are the key to enhancing the quality of our children's education across the country. As important as it is to help children get ahead, we also have to ensure that some students are not left behind. Unfortunately, the benefits of existing education programs are not shared by all children. Increasingly, we are creating an under-class of young people, a class that lacks meaningful educational opportunities. This under-class is characterized by high dropout rates, basic skill deficiencies, and severe illiteracy problems. We cannot allow this two-tiered system to continue in the world's greatest democracy.

The Schools Excellence and Reform Act, which recently was introduced in the House by Congressman Hawkins, will ensure that quality education programs are available to all young people in America. I would like to work with Senator Dodd and other supporters of that measure in the Senate and House to examine and move forward that School Excellence and Reform Act.

Together, both the ADEA and the School Excellence and Reform Act are significant steps toward the development of educational programs that will provide all of our young people with the knowledge and skills to think and grow and prosper.

Programs, of course, are not cost-free. As Senator Andrews said, we should not avoid that reality. But like Senator Andrews, I believe that these costs are an investment and not the normal out-of-pocket kind of spending that most people criticize.

The tough choices imposed by the budget deficit require that we examine both of these bills carefully. But I believe that we must choose to afford these programs, for an investment now in the education of our young people is a critical investment in the future of this Nation.

Mr. Chairman, I thank you again for your tolerance and patience and your wisdom in once again undertaking to consider these measures and this legislation.

[The prepared statement of Senator Hart follows:]

TESTIMONY BY SENATOR GARY HART
Subcommittee on Education, Arts and Humanities
July 25, 1985

I want to thank the Chairman and other members of the Subcommittee for the opportunity to testify this afternoon.

My comments focus on the American Defense Education Act. I introduced this legislation in both the 97th and 98th Congresses, and hearings took place in both the House and the Senate during the last Congress. It was introduced again this session, and now has 19 cosponsors.

Since the ADEA was first introduced, Congress passed a measure with a similar aim -- to improve math and science education. But that bill -- the Education for Economic Security Act -- is only a half-way, short-term measure.

We must do more. Our nation's demand for highly skilled math and science graduates is growing just as the achievement of our students in these areas is falling relative to other nations. A generation ago, our nation responded to a similar challenge -- sparked by the launching of Sputnik in 1957 -- by enacting the NDEA. Today, we need a similar, comprehensive, long-term measure to make our nation's students high achievers in math and science.

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Most of us are aware that the jobs of the future will place a high premium on technological and scientific education. The Department of Labor estimates that, by 1995, the number of jobs for those with engineering skills will increase by 49%; for those with life and physical science skills by 26%. Our students must have the skills to fill these jobs to ensure the nation's economic prosperity in an internationally competitive enviroment.

The demand for quality technological education also extends to our military forces. The growing complexity and sophistication of our military technology requires that our armed forces personnel master skills in such areas as computer programming, electronics, advanced communications systems, and complex maintenance.

By ensuring that our youngsters learn the skills of tomorrow, we are doing more than promoting our nation's interests in a competitive world. All Americans hope that their children will rise beyond the hardships experienced by many of our generation. Certainly, most of us are determined that our youngsters will not face economic desperation -- the desperation and helplessness felt by many of our displaced auto and steel workers.

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Only if our youth learn new technological skills will they be prepared to prosper and grow in a changing economy. Only then will they have the abilities to explore and innovate in new areas, and gain intellectual fulfillment for themselves and security for our nation.

Unfortunately, our education programs are not providing our young people with adequate skills to meet the challenges of our changing world. The dangerous trends in math and science education that I pointed out before this Subcommittee in 1982 have only continued. Recent statistics outlining these trends are alarming.

Scholastic Achievement Test (SAT) scores have fallen sharply in the last two decades -- from an average test score in mathematics of 502 in 1963 to 467 in 1983.

In 1960-61, 60% of our high school students were enrolled in at least one science course; that figure fell to 44% in 1981-82.

Only 5% of our nation's high school students studied physics in 1981-82, and only 12% studied chemistry.

The National Assessment of Educational Progress shows a steady decline from 1969 to 1982 in scientific knowledge, inquiry, use of scientific method and application of science in

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everyday life among 17-year-olds about to enter college or the work force. NAEP also recorded a sharp decline in math among 17-year-olds from 1973 to 1982.

While we are failing to educate most of our youngsters in math and science, our international competitors are devoting more attention to this task.

One-half of all high school students in the United States take no mathematics or science beyond the 10th grade. In contrast, in Japanese secondary schools nearly all the college-bound students take 3 natural science courses and 4 mathematics courses during their 3 year high school career.

The Soviet Union has instituted a general curricula at the primary and secondary levels, which in terms of its heavy focus on science and technology, is the most advanced in the world. In addition to 2 years of calculus, all youngsters in the Soviet Union are required to complete 5 years of physics, 4 years of chemistry, 4 years of biology and 5 years of algebra.

Not surprisingly, our inattention to math and science education is matched by a decline in the number of qualified teachers in these areas.

The National Science Foundation shows that, for the 1982-1983 school year, 46 states reported a shortage of

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chemistry teachers, 45 reported a shortage of mathematics teachers, and 42 reported a shortage of physics teachers. These shortages were significantly greater than in 1981-1982 and, from all indications, will continue to grow as the baby boom echo begins to expand our enrollment rosters.

This bleak portrait of math and science education in the United States is disturbing and dangerous. The scenario demands a comprehensive and effective national response.

The four programs proposed in the American Defense Education Act are carefully targeted to meet the critical shortcomings in the education provided our nation's children.

Under the ADEA, local school districts develop and implement programs in elementary and secondary schools to improve instruction and student achievement in mathematics, science, foreign languages, communications skills, and technology.

During each fiscal year, school districts working with the ADEA program are entitled to a basic payment of two percent of the average per pupil expenditure in that state -- but not less than the average per pupil expenditure in the United States -- multiplied by the number of children in average daily attendance in the school district.

And, for each district that shows substantial evidence that the program meets the ADEA goals for the year, an additional two percent payment is available. This formula encourages local districts not only to develop new programs, but to create quality programs.

The bill encourages institutions of higher education to coordinate efforts with local school districts for the training and retraining of teachers through workshops, summer institutes and in-service training.

The ADEA also authorizes funds through the National Institute of Education to support research and development in effective teaching and learning techniques in math, science, foreign languages and technological training.

An additional component of the ADEA calls for the Secretary of Defense to project the personnel training needs of the Armed Forces. Then, in conjunction with the Secretary of Education and local educators, the Secretary will analyze the best way for education to help meet those needs.

The ADEA provides localities with necessary aid without stifling local initiative or flexibility. It encourages excellence in education, by providing local districts with incentives to develop quality education programs. By developing programs to train our young people for a changing

world, we are investing in a safer, more prosperous future for our nation.

Let me point out some of the features of the ADEA that I believe are particularly relevant to the challenges I've described. First, the ADEA encourages the development of programs to improve not only students' science and technological skills but also their communication and foreign language skills. In this increasingly interdependent world, our nation's ability to communicate with other countries will affect both our economy and security. Our citizens must be able to communicate effectively with representatives of foreign nations -- to negotiate treaties, establish trade policies, and engage in cultural exchanges.

Second, the ADEA does not create a federal bureaucracy to implement a vast, new program. Instead, the federal government acts as a catalyst to encourage local school districts to develop effective programs. Local initiative and flexibility are stimulated rather than stifled.

Finally, the ADEA encourages partnerships among those who share responsibility for our children's education: interaction between the federal government and local school districts in initiating programs; between parents, teachers, and business leaders in establishing evaluation procedures for the programs; and between institutions of higher education and local school

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districts in developing teacher training programs. Partnerships such as these are the key to enhancing the quality of our children's education.

The ADEA is a comprehensive bill, specifically targeted to improving our youngsters' education in math, science, communications, foreign language and technology. I believe that improvements in these areas will lead to education programs in this country that are second to none.

As important as it is to help children get ahead, we must also ensure that some students are not left behind. Unfortunately, the benefits of our existing education programs are not shared by all children. Many of our poor youngsters -- and statistics reveal that one in five children live in poverty -- are faced with dismal education prospects. Increasingly, we are creating an underclass of youngsters -- a class that lacks meaningful educational opportunities. This underclass is characterized by high drop-out rates, basic skills deficiencies and severe illiteracy problems.

We cannot allow this two-tiered system to continue. The School Excellence and Reform Act, which recently was introduced in the House by Congressman Hawkins and mentioned by Senator Dodd in his opening statement today, will ensure that educational opportunities and quality education programs are available to all youngsters. I would like to work with Senator

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Dodd and our other interested colleagues in the Senate to examine and move forward the SERA.

Congressman Hawkins has incorporated some of the provisions of the ADEA in Section 4 of the SERA. However, I believe that the most significant contribution of the SERA is in Section 5, to improve the educational prospects for disadvantaged students. The funds allocated for Section 5 can be used by local education agencies for educational improvement in such areas as dropout prevention, school day care, secondary school basic skills and inservice teacher training.

Both the ADEA and the SERA are significant steps toward the development of educational programs that will provide all of our youngsters with the knowledge and skills to think, grow and prosper. The programs, of course, are not cost-free, and the tough choices imposed by the budget deficit require that we examine these bills carefully. But I believe that we must choose to afford these programs, for an investment now in the education of our children is a critical investment in the future of our nation.

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Senator STAFFORD. Thank you very much, Senator Hart, for joining us, and for your very good statement. Since we served together for many years on another committee, we have often see eye-to-eye, and I think we do on the issues that you have raised here.

I thank you very much.

I doubt if there are questions, but if there are—Senator Simon.

Senator SIMON. No questions, just a comment, Mr. Chairman, if I may, to underscore what you have said and what Senator Andrews has said.

The 5 years of physics required in the Soviet Union compares to 16 percent of our high school students getting 1 year of physics. We have more school districts in the United States than we have physics teachers in the United States, an astounding fact.

You mentioned foreign languages. We are the only Nation on the face of the Earth where you can go through grade school, high school, college, get a Ph.D. and never have a year of a foreign language.

And we wonder why other countries do not buy from us when we cannot even speak the language of our customers.

I applaud what you have said, and I thank you.

Senator STAFFORD. Thank you very much, Senator Simon. And thank you again, Senator Hart. You are welcome to stay, if you have the time.

Senator HART. Thank you, Mr. Chairman. I appreciate it.

Senator STAFFORD. I am going to get the panel to the table, and then there will be two introductions before they speak.

So, Mary, if you will come to the witness table and take a seat, and Maida, if you will also do the same, and Peggy Portscheller, if you will also, so that the panel is in place.

Then, we will ask—well, I am going to be a little parochial here and ask Senator Leahy, my partner in the Senate, if he will introduce Maida Townsend to us.

Senator LEAHY. Thank you very much, Mr. Chairman.

Having had a number of instances where I have appeared with my distinguished senior colleague from Vermont, I must say that it is a pleasure to appear here with you in your role of Chairman of the subcommittee. It is a good feeling to come before so distinguished a subcommittee, because I do want to lend my support to S. 177. It has bipartisan support throughout the Senate, for a very good reason, and also by Senators from both large and small States, something we would note, coming from the State of Vermont, where we try always to make up in quality in our education what we may lack in size.

S. 177 is straight-forward in its approach. Many might say that it is the Sputnik era of legislation for the eighties and into the nineties, which really it is. When Senator Simon mentioned earlier that one could go through grade school, high school, college and Ph.D., without taking a foreign language—that is a sad thing. I recall when I was in high school that you had to take both Latin and a foreign language before going to college, and you took at least one in college.

I have a neighbor whose children are going through school in Germany. If they want to go to college, they are expected to take a foreign language. English does not count; they take that anyway,

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so they have that as a second language, but then they are required to take yet a third if they go on.

We have got to do better in foreign language and technology skills, and under this bill, Federal funds would be targeted for the specific improvements of those subjects.

I am going to have a full statement, Mr. Chairman, which I would ask to be made a part of the record in full, if I could.

Senator STAFFORD. Without objection, it will be made a part of the record in full.

Senator LEAHY. I would just say that Vermont has been traditionally a leader in innovative, lasting educational programs. I might say, Mr. Chairman, that you are one of the reasons for that, both as Governor, as a Member of the House, and as a Member of the Senate. I would say another person responsible for that is sitting just to my left, the head of the Vermont NEA, and my dear friend, Maida Townsend.

Maida does not need introduction to a Vermonter. I would just say for Senator Andrews and Senator Simon that Ms. Townsend is one who, when she speaks on educational matters, we all listen. She is one of the ones who can very quickly get the Vermont Congressional delegation together at one time, and one who is respected by all three of us.

Mr. Chairman, I am delighted to be here and delighted to introduce our mutual good friend, and very pleased to strongly support the legislation before you.

[The prepared statement of Senator Leahy follows:]

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Statement by Senator Patrick Leahy

Before the Education Subcommittee of the Senate Labor

and Human Resources Committee

on S. 177, The American Defense Education Act.

"Nothing Less Than Excellence"

July 25, 1985

I appreciate the opportunity to come before this distinguished subcomittee to lend my support to S. 177, The American Defense Education Act.

This bill has attracted bipartisan support in the Senate. Its supporters include Senators from large and small states, and as we will hear today, it has been endorsed by leading professional educational organizations.

S. 177 is straight-forward in its approach. It seeks to improve the quality of math, science, communications skills, foreign languages and technology education in the Nation's public classrooms. Federal funds would be targeted for the specific improvement of those subjects and to assist local school districts' guidance and counseling programs.

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We must strengthen elementary and secondary curricula throughout the country in these essential subjects, to maintain a competitive edge in international economic markets and in the "hi-tech", information age.

The ADEA provides a good mix of federal and local involvement in administering the program. Its provisions draw heavily on established principles of accountability in what I hope will be a national resolve to settle only for excellence in the American classroom.

A particularly strong feature of the legislation allows each participating school district to determine its specific educational problems and the best means to address them. Locally measurable goals will be announced and progress will be evaluated at least on an annual basis. The program provides bonus payments to those high-achieving school districts demonstrating genuine student improvement.

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The Act brings together the federal departments of Defense and Education to focus on the educational achievements of young Americans to determine how the need for qualified personnel in the armed forces can be met without remedial education. The American Defense Education Act may ultimately prove to be a real cost-saver. It will result in a stream of military recruits who will arrive at basic training sites with skills that can be immediately put to use without the need for expensive remedial education and training.

Vermont has traditionally been a leader in innovative and lasting educational programs, and we intend to maintain that hard-earned reputation. With us today is a distinguished Vermonter with whom I have worked on many occasions. She is widely known throughout the state and the country for her unswerving dedication to quality public education and high standards of student and teaching achievement. She is here today to give us her views on the American Defense Education Act and on the public education system.

It is my pleasure to introduce one of Vermont's distinguished citizens, the head of the Vermont-NEA and a dear friend, Maida Townsend.

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Senator STAFFORD. Thank you very much, Senator Leahy, indeed, for being here and introducing Maida to the committee.

And, since this seems to be the small State opportunity for a few rounds, I am most happy to be able to recognize next my travelling companion in one responsibility and a very valuable member of the Environment and Public Works Committee, and a senior member of it, Senator Quentin Burdick, to introduce Peggy Portscheller.

Senator BURDICK. Thank you, Mr. Chairman.

I appreciate the chance to appear today before the subcommittee, along with my colleagues and our distinguished representatives from the educational community.

Mr. Chairman, 2 years ago, the President's Commission on Excellence in Education released its landmark report, "A Nation At Risk." That report was the start of something big. Ever since then, we have seen an avalanche of studies, reports, and endless commentary about the crisis in our schools. There is little question that our education system needs reform. Illiteracy is widespread; drop-out rates are alarmingly high; violence is on the rise, and test scores are lower now than they were in 1957, when the Sputnik launch occurred.

The question is not whether our schools have a problem, but how to address the problem. Not long ago, I had the opportunity to talk to a group of teachers from all 50 States. Looking at those dedicated, energetic, committed educators, I was certain of one thing: We have the human resources. Now, we need to commit the financial resources.

As a cosponsor of the American Defense Education Act, I wholeheartedly support the program of reform established by this legislation. The ADEA authorizes a national program to improve teaching in math, science, and technology, communication skills, foreign language, and guidance and counseling. Administration of the program will be under the Department of Education. By taking into account the special needs for education that have been created by rapidly advancing technology, the ADEA calls on the Secretary of Defense to project the educational needs of the Department of Defense and the personnel needs of the Armed Forces.

The pearl of the ADEA is in its carefully constructed plan for cooperation between the Federal Government and the States. The legislation requires participation and input from local school boards, administrators, teachers and parents. School districts develop and implement their own programs and tailor them to their specific needs. And the local schools are responsible for evaluating their programs to make sure those programs are working.

The ADEA responds to our clear need for action—for students, teachers, and our communities. It deserves our strong support.

I want to add my support to another proposal which has been mentioned here today. That proposal, the School Excellence and Reform Act, has been introduced in the House and may be introduced in the Senate soon. I certainly hope it is. I believe the bill would make needed improvements. The SERA combines general aid for excellence in education with targeted aid to those students who have been underserved by our present education system.

In my home State of North Dakota, we have a large Indian population and a very rural population. As you know, Mr. Chairman,

coming from a rural State yourself, rural communities have a harder time with education. Money is short. Teachers are in short supply, and facilities, well, they are not exactly state-of-the-art.

Rural States like North Dakota need the help that ADEA and SERA would provide.

Mr. Chairman, you do not have to take my word for this. We are privileged to have with us the president of the North Dakota Education Association, Peg Portscheller. Peg was a career education teacher in Minot for 9 years. Before that, she taught English and business education. For the past 4 years, Peg has served as the vice president of the North Dakota Education Association. Just recently, she was elected to a 2-year term as president. The presidency is a full-time job, and truly a full-time commitment.

We are happy to have Peg behind the wheel in North Dakota and I am glad to introduce her to the subcommittee today.

Senator STAFFORD. Thank you very much, Senator Burdick, for a very gracious introduction of Peg.

And Mary, we do not really have much protocol in Vermont, but we do recognize it exists, so I have reversed it in your case and saved the senior officer to be introduced last. I am going to do that myself, since I have known you a spell and how well you have run NEA nationally, and you certainly have my admiration, and I am glad that you are here as the senior spokesman for the National Defense Education Act, or its current version.

I am going to ask you, if you will, to be the lead-off speaker here. We have full statements from everybody. To the extent you can, we would appreciate it if they could be summarized in 5 or 6 minutes, because we are living under the gun of a roll call vote in the Senate during the rest of the afternoon, which could at least put a temporary halt to these proceedings.

So, rather than use up more time myself, except to note, Senator Burdick, that if you wish to stay, you are more than welcome, and if you have to leave, we understand.

Mary, the floor is yours.

STATEMENT OF MARY H. FUTRELL, PRESIDENT, NATIONAL EDUCATION ASSOCIATION, WASHINGTON, DC, ACCOMPANIED BY LINDA TAUB-WHELAN, DIRECTOR, GOVERNMENT RELATIONS DIVISION, NEA; MAIDA F. TOWNSEND, PRESIDENT, VERMONT NATIONAL EDUCATION ASSOCIATION, MONTPELIER, VT, AND PEG PORTSCHELLER, PRESIDENT, NORTH DAKOTA NATIONAL EDUCATION ASSOCIATION, BISMARK, ND

Mrs. FUTRELL. Thank you. And I would like to say that it is an honor to be introduced by you.

Mr. Chairman and members of the subcommittee, thank you for the opportunity to appear before you today. As Senator Stafford indicated, I am Mary Futrell, president of the National Education Association, and joining us at the table is Linda Taub-Whelan, who is the director of the NEA Government Relations Division.

Since 1983, the education reform movement has generated new achievement standards and requirements, new accountability measures, new calls for testing of both students and teachers, and new attempts to extend the school day and year.

Yet, when all is said and done, little attention has been focused on developing strategies to ensure that each and every child—not only the smartest, the wealthiest or the collegebound—will have the means to meet these new requirements. This emphasizes the need for addressing compelling problems as yet unattended by the reform movement.

I thank you, Mr. Chairman, and members of the subcommittee, for these hearings on the American Defense Education Act, which offer the opportunity to focus on them. The ADEA was introduced in the 98th Congress, with strong backing from the NEA. We saw it as the first vehicle to breathe new life into every school district across the country at a particularly important time

ADEA's community-based problem-solving focus calls for self-determination at the local level to help respond to the problems that are national in scope.

ADEA recognizes that States and localities alone cannot bear the burden of responding to public demands for improvement in our schools. It enjoins the Federal Government to participate as a full financial partner in the reform initiatives.

In the years since ADEA was first introduced, many individuals and educational organizations have come together to address not only the need for a legislative centerpiece to address educational excellence, but also a means to respond to to her problems now confronting us. These efforts have resulted in the development of a new measure known as the School Excellence and Reform Act, or SERA.

It is with no misgivings that I come before you today to bring our full support to SERA, for SERA incorporates ADEA's heart and soul as its basic principles. It takes a timely and twofold promise for education's well-being. Like ADEA, SERA offers every school district the opportunity to design and implement strategies and programs for reform. And SERA offers additional resources to counter the problems yet unaddressed by the current reform movement.

You may ask: Why SERA, and why now? Because every day, we are losing millions of children in our country to poverty, poverty that robs their stomachs, ravages their bodies, stunts the growth of their minds, and steals their hopes and dreams.

Personally painful to me as a classroom teacher are the millions we lose annually as drop outs from our schools. Nearly a third of our teenagers leave high school without a diploma in-hand. In urban areas, between 50 and 80 percent of teenagers are dropping out of school before graduation. For minority and low-income students in particular, this is a horrible reality.

We can add to this the problems of illiteracy now plaguing millions of our youth and adults. We as a nation cannot allow these conditions to become the legacy for our future.

The NEA has recently pledged $1.7 million, one dollar for each of our members, to combat the dropout problem. But we realize that $1.7 million represents only a start in overcoming this national crisis.

I also would like to say to the subcommittee that I come to you today from Philadelphia after attending an Educational Commission of the States meeting, whereby the ECS has put together a

Business Advisory Committee to address the issue of the dropout problem in America. I must say to you that the findings are startling and have tremendous social, economic, political and educational implications for America as a democratic society. That is why I believe SERA, which would provide long-term Federal support for fighting problems such as school drop outs and illiteracy, is so essential. SERA calls for general assistance, for educational excellence and support for math, science, communication skills, technology education, foreign languages and guidance and counseling. It also would target aid to the needs of historically unserved and underserved students. SERA represents a responsible approach to supporting excellence and reform in our public schools. It demands accountability from State and local education agencies, and it is results oriented.

SERA includes a very American concept and a truly national cause. It invites the participation of parents and all citizens in making education everyone's business.

NEA believes that SERA is this Nation's opportunity to institutionalize a Federal education excellence policy with local determination and equity at its core.

Mr. Chairman and members of the subcommittee, the Federal Government must join local and State governmental entities and the education community efforts to assure that the pursuit of excellence in the education reform movement will not be a fleeting nor a superficial experience. We challenge this Nation, this President and this Congress to join with us in seeking lasting education change, by ensuring that every child in this Nation has the opportunity to partake of the best education possible and a fighting chance to do so with success through passage of SERA.

Thank you very much.

Senator STAFFORD. Thank you very much, Mary, for the excellent statement and thank you for finishing in a style which would make Calvin Coolidge proud of you. [Laughter.]

[The prepared statement of Mrs. Futrell follows:]

LEGISLATIVE INFORMATION

TESTIMONY

OF THE

NATIONAL EDUCATION ASSOCIATION

BEFORE THE

SENATE SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES

PRESENTED BY

MARY HATWOOD FUTRELL

PRESIDENT

JULY 25, 1985

MARY HATWOOD FUTRELL, President • KEITH GEIGER, Vice President • ROXANNE E. BRADSHAW, Secretary-Treasurer
DON CAMERON, Executive Director
(202) 822-7300

Mr. Chairman and Members of the
Subcommittee on Education:

Thank you for this opportunity to appear before you today. I am Mary Hatwood Futrell, President of the National Education Association. NEA's 1.7 million members are classroom teachers, higher education faculty, and education support personnel in public schools and postsecondary institutions in each of the 50 states.

Since 1983, we have seen a flurry of reports on the crisis in education which has sparked an educational reform movement not witnessed since that generated by the Sputnik era. North to South, East to West, local and state education governing bodies have moved to respond to the public demands for improvement in public education.

In the name of educational reform, numerous legislative and administrative remedies are being tried by school systems across the country. In some cities and states, there are new achievement standards and requirements. There are new accountability measures. There is much talk of testing -- testing of students and of teachers. There have been suggestions of extending the school day. ''Choice'' is a new code word in the education reform vocabulary.

But when all is said and done, we may have many newly implemented standards and requirements for student achievement --

but we have no strategies to ensure that each and every child (regardless of hue or economic station) will have the means to meet them.

We have performance tests -- but not the sufficient supportive services that millions of American youngsters will require to pass them.

There are millions of American youngsters going unserved by existing supportive educational programs. Chapter 1 serves only 45 percent of the estimated 11 million children in need. As the Children's Defense Fund points out, bilingual education is reaching only one-third of the approximately 3.6 million children who are eligible. Despite attempts by Members of this Subcommittee to correct the situation, vocational education programs continue to perpetuate inequities by segregating students by sex and race.

And we have millions of words that speak to the problems of education -- but few that focus on the very basic and gross disparities in school funding that still deny effective schooling experiences to millions of this country's young.

While many of the recent national education reports devote space to the principle that educational reform must bring excellence for all, few have addressed the problem of unequal educational experience. As Harold Howe so aptly puts it:

''Clearly there is little remaining commitment to the idea that separate and unequal schools are unacceptable and not enough commitment to equal opportunity to elicit clear and specific recommendations on how these crucial goals are to be pursued.''

Mr. Chairman, these introductory comments are not intended to dampen the spirit or the momentum of the educational reform movement. Neither are they intended to degrade the many well-intended measures that have been taken in the name of educational reform. Rather, they serve as a means of pointing out that what has occurred thus far has barely scratched the surface of the greater challenges still facing us in the field of education.

My comments are offered in an attempt to help us focus on what the reform movement has really produced and, in a more substantive way, to point out the necessity for broadening that effort. We have ''many miles'' yet to go in the education reform movement. We have many education problems that remain unresolved. But to find those answers we need to inspire all Americans to become involved so that we can ensure that every American child has the best education this nation can provide.

The education reform movement, Mr. Chairman, is still in its infancy. If it is to grow and to mature into a long-lasting campaign for excellence in education for all, I believe there are several compelling issues that must be addressed. I thank you and this Subcommittee for these hearings on the American Defense

Education Act which allow us to focus on them.

As NEA's Blue Ribbon Task Force on Educational Excellence points out in ''An Open Letter to America on Schools, Students and Tomorrow'':

The conflict over public education is a debate over the values and goals which should shape our society. It is a debate over the expectations we should have for ourselves and our children, for our future, and for our society. The dream of what America can be, the high goals her people share, and the great strengths her people possess have always been closely interwoven with our system of public education.

In the 98th Congress, the American Defense Education Act was introduced in the House and Senate with the strong support of the National Education Association. We supported this measure because we saw it as the best hope for breathing new life into every school district across this country.

ADEA offers school districts incentives and resources to improve the programs that impact on our national education priorities. It calls on everyone in the community to become involved in helping to improve education. Its strength is in its component for local school district involvement and self-determination. It allows local communities to tailor-make programs to fit the needs of their schools -- whether by

improving curriculum design, preparing new or specific courses, or providing teacher training in critical subject areas such as math, English, or science.

ADEA reaffirms many of the concepts on which the federal role in education has been built since the early years of the Republic. It recognizes the importance of education to a free and democratic society, to a productive economy, and to the maintenance of our national defense. It acknowledges long-standing federal policy encouraging the states to establish systems of public education, and encouraging the states and localities to maintain and improve their public schools. And it recognizes the goal of equal educational opportunity as well as the national policy that every citizen is entitled to an education to meet his or her full potential without financial barriers.

More than that, however, ADEA recognizes the severe financial stress on local school districts attempting to respond to the public demands for change and improvement. While the federal government fully acknowledges the shortcomings of our public schools, it has in recent years not participated as a full and contributing financial partner to the initiatives that will correct those ills.

<u>The ADEA is back in the 99th Congress for one simple reason -- the educational and national needs for it still exist.</u>

Since ADEA was first introduced, many individuals and education organizations, such as the NEA, have come together to address not only the need for a legislative centerpiece which would serve as a framework for the national pursuit of educational excellence but also a measure that would directly respond to other major problems confronting us in education. I am pleased to say that these efforts have resulted in the creation of a new legislative measure now known as the School Excellence and Reform Act.

Let me assure you that our Association's commitment to ADEA and its principles and provisions is still alive and strong. Thus, it is with no misgivings that I say to you that we are ready to bring our full support to SERA. For SERA fully acknowledges our original concerns by incorporating ADEA's principles and yet addressing those other pressing issues that require our national attention. SERA makes a timely and two-fold promise for education's wellbeing. Like ADEA, it offers every school district in this nation the opportunity and assistance to design and implement strategies and programs for educational reform. But it also provides additional resources to counter those special problems uncovered in our pursuit for excellence.

Why SERA? Why now -- when budget deficits are testing our national will to get our financial house in order?

The short answer is: For the benefit of our very future.

The long answer is more involved, yet far more compelling.

Let me begin with those most at risk in education -- our young.

We all know there is nothing more painful than losing a child. Today, Mr. Chairman, we are losing them by the millions.

We are losing 13 million of them to poverty--poverty that robs their stomachs, ravages their bodies, stunts the growth of their minds, and steals their hopes and dreams.

We are losing millions of children to drugs and alcohol that fog their brains and dim their life chances.

Personally painful to me as a classroom teacher and to my colleagues are the millions we lose annually as dropouts from our schools.

Today, Mr. Chairman:

o Thirty percent of 17- and 18-year olds never leave high school with a diploma in hand. In some urban areas, the dropout rates reach crisis proportions of 50 to 80 percent. For lower

income students, many of them minority students, school failure is an increasing but horrible reality.

o One million teenagers cannot read above the third grade level.

o Thirteen percent of all 17-year-olds are functionally illiterate. Functional illiteracy among minority youth may run as high as 40 percent, according to ''A Nation at Risk.''

o Fifty percent of college entrants dropout in their first year of higher education.

o One-third of all adults are functionally or marginally illiterate.

What we have, as the recent report of The New World Foundation (''Choosing Equality: The Case for Democratic Schooling '') explains, is ''chronic inequality in the school resources allocated to poor and declining communities, in the ways that learning is...structured, in the ways schools treat diverse needs and potentials.''

Mr. Chairman, we cannot allow these figures, these conditions to become our legacy for the future. To do so would be to condemn this nation's youth to a life of underdevelopment. To do so would be to endorse the creation of a permanent underclass in our society -- a society in which many cannot read, many cannot write, many cannot compete in the labor markets of the future, many cannot contribute what they might to our tax

base which supports our nation's schools, our general wellbeing and our defense -- many, in other words, who cannot function as full participants in this democracy.

While NEA just recently pledged $1.7 million --a dollar for each of our members -- to fight the dropout problem, those funds do not approach the resources necessary to fight the massive problems faced in this arena. But it is a start. SERA would provide a crucial long-term federal contribution to this national problem.

SERA incorporates provisions for general aid for educational excellence as well as improved instruction in math, science, communications skills, technology education, and foreign languages, and in guidance and counselling. And it contains targeted aid to meet the needs of historically unserved and underserved students -- aid for such programs as dropout prevention, early childhood education, school day care, inservice teacher training, effective schools, and secondary basic skills.

The bill represents a sensible and responsible approach to supporting excellence and reform in our public schools at a time when concern about the federal deficit is a national preoccupation. SERA demands accountability from state and local education agencies. It is results-oriented. Continued federal funding is assured only when school and student improvement occurs.

At a time when the public concern and expectations for our public schools are high, the financial burden of fueling the educational reform movement has been left exclusively to state and local governments. The major source of revenue for public elementary and secondary schools today is the state. States are providing 49 percent of school revenues. Local governments are contributing 45 percent.

The states have clearly extended themselves to provide quality education, both in terms of per capita expenditures and as a percent of expenditures for all function. An estimated 36 percent of all state and local expenditures is earmarked for education. Education is the single largest expenditure by state and local governments and it is usually the only one on which taxpayers vote directly.

Since the passage of the Northwest Ordinance in 1785, the federal government has provided crucial leadership and financial support to education as a critical national concern. It has done so in times of peace and in times of war; it has done so in times of economic hardship and economic wellbeing. It has not shirked its responsibility to an educated democracy. In recent years, however, that role has diminished significantly.

Currently, total spending for public elementary and secondary education from all sources is $125 billion per year. Of that, the direct federal share is 6.2 percent -- its lowest

level of funding since the Sixties. Even that federal contribution is at risk as current tax reform proposals seek to eliminate the deductibility of state and local taxes.

The involvement of the federal government today is critical when one analyzes projections in education enrollments. The U.S. Census Bureau recently reported a nine percent increase in the number of preschool children in the country since 1981. The birthrate began to climb in 1977, and this year there are 54,000 more elementary school students in the nation's classrooms. This growth is expected to continue into the 1990s, according to the National Center for Education Statistics. NCES predicts that enrollment in kindergarten through grade eight will grow from the current 26.6 million to 30.5 million by 1993.

This result of the ''baby boomlet'' will have tremendous impact on school districts that may find themselves shifting financial emphasis to incoming students before reform measures have been given a chance to take hold or succeed.

At the same time, schools will be facing an additional crisis -- the shortage of classroom teachers. The baby boom now in progress has created a need for an additional 250,000 teachers within the next five years alone. But the shortage problems are compounded by other factors. Still more teachers than that will be needed to fill vacancies created by the growing numbers of younger teachers leaving education for higher paying jobs in

business and industry, retirements and resignations by teachers moving into better employment opportunities; and, the fact that colleges and universities aren't training enough students to fill those increasing numbers of teaching vacancies. All of these factors together spell a total shortage of 900,000 teachers within the next five years.

NEA believes the federal government should now assume its rightful role in the support of our nation's public schools by making its contribution through SERA. Even fully funded, SERA represents only a miniscule downpayment on what the national reform reports proposed for building a foundation of excellence in our schools.

The heart of the matter, however, is that we cannot afford not to make this federal effort.

SERA includes a very ''American'' concept in a truly national cause -- it invites the participation of parents and all citizens. This is as it should be. For the battles in education will never be won by just a few. It will take all of us.

This is a recognition that administrators can administer and teachers can teach, but we need the help of parents to get children to school in a physical condition and frame of mind

receptive to learning. A drugged mind or hungry body will yield only a malnourished mind and a society that missed its potential. By the same token, governmental and education decisionmaking bodies can mandate, but parents, teachers, business and industry leaders -- the whole of the community -- must bring their forces to bear on how best to meet our educational needs and solve our education problems.

Education is everybody's business.

Finally, I believe SERA makes the case for those who have been unserved and underserved. It reaffirms the federal commitment to education. The federal role commenced on the premise that all should have equal opportunity to education. The statistics I have shared with you today indicate that we have fallen short of meeting that goal.

Those statistics rebut those who seek to diminish the federal role in education at the expense of those who can least afford it. They also negate the arguments of those who understand equality merely as the opening of the doors without regard to how resources and assistance are distributed to benefit all.

As Ernest Boyer of the Carnegie Foundation so well states it: "...in the debate about public schools, equity must be seen

not as a chapter of the past but as the unfinished agenda of the future.''

The expectations for quality in education must never be divorced from the expectations for equality. We wholly agree with the National Commission on Excellence in Education:

We do not believe that a public commitment to excellence and education reform must be made at the expense of a strong public commitment to the equitable treatment of our diverse population. The twin goals of equity and high-quality schooling have profound and practical meaning for our economy and society, and we cannot permit one to yield to the other either in principle or in practice. To do so would deny young people their chance to learn and live according to their aspirations and abilities.

The achievement of quality schooling requires financial support from all levels of government, local, state and federal.

NEA is committed to quality education for all children in America, be they rich or poor, able-bodied or handicapped, gifted or slow to learn, English-speaking or unable to speak English, male or female, white or of color. SERA, we believe, reflects that principle.

NEA believes that SERA is this nation's opportunity to institutionalize a federal education excellence policy with

local determination and equity at its core.

Mr. Chairman, the federal government must join the local and state governmental entities and the education community in efforts to ensure that the pursuit of excellence and the educational reform movement will not be a fleeting experience. We challenge this nation, this President, and this Congress to join with us in our goal of seeking to achieve lasting educational change -- by ensuring that every child in this nation has the opportunity to partake of the best education possible and a fighting chance to do so with success -- through passage of the SERA.

Thank you again for this opportunity to make the case for education.

Senator STAFFORD. Since we are going in the order of introduction here to some degree, Maida, we would recognize you next.

Ms. TOWNSEND. Thank you, Senator Stafford.

Senator Stafford, members of the subcommittee, on behalf of the teachers and the children of Vermont, I thank you for this hearing.

Vermonters strive to ensure for every child both quality educational opportunity and equality of educational opportunity. I do not indulge in hyperbole when I say that, in that pursuit, the Vermont property taxpayer is being bled dry by lack of a genuine partnership for education among the local, State, and Federal governments. And we of the Vermont-NEA dread the consequences in our schools if relief is not soon forthcoming. In Montpelier, we have asked that needed reform be addressed, and we have proposed legislation designed to implement such reform. Here in Washington, we ask that the Federal Government also do its fair share for our children and support progressive public education initiatives.

The American Defense Education Act is such an initiative; and in terms of both dollars and method of distribution, ADEA contains many components for school improvement and excellence which are attractive to Vermont educators—participation is voluntary and incentives-driven; needs are assessed locally, with instructional improvement programs developed and assessed locally; community participation is ensured; and Federal assistance is supplemental, not supplanting, with such assistance flowing directly to the local level. And such Federal assistance would not be insubstantial. Vermont alone could, in 1 year, receive approximately 4.5 million new Federal education dollars. It is by no means an inexpensive proposition, but we in Vermont believe our children are worth it, and we frankly need the help, and we ask for it.

The School Excellence and Reform Act is yet one other initiative for which we urge your support. Indeed, we particularly recommend to you the School Excellence and Reform Act. Given the reality of the Federal deficit, but equally the reality of the needs of our schools, we see as reasonable and tightly efficient the split of SERA's $2 billion price tag—$1 billion in support of general improvement and excellence, $1 billion in support of reform and equity.

We in Vermont particularly applaud the inclusion in the latter component of support for early childhood education, in-service teacher training, and drop-out prevention. Yet we also are concerned that the distribution formula for the reform and equity component may result in very little help for a small State such as Vermont, and we need more than very little help.

For several years now, we have been working to establish State support for early childhood education. Indeed, it was only this past year, after a 15-year effort, that Vermont finally made publicly-funded kindergarten law, and provided funds to support that law. As it was for kindergarten, it still is for early childhood education. Individual parents or individual communities must be willing to and/or able to make the additional financial effort to provide that early education. Consequently, those children who have, have more; those who do not remain behind the eightball—and equal opportunity remains a myth.

We are equally sensitive to the need for support of in-service teacher training. Currently in Vermont, approximately one-half of one percent of local budgets is destined for professional development activities. While at the State level we have established what is called the In-Service Institute for Professional Development, it limps along at best, starved for funding. This past year, out of a State budget nearing $400 million, our legislature appropriated not one cent—not one cent—for institute support. While we know that we are doing a good job in Vermont's classrooms, we know that we can do better, and we, the teachers, are literally crying out for meaningful in-service.

On the issue of drop-out prevention—in Vermont, our drop-out rate has been inching downward over the past several years. It is projected that in the 1985–86 school year, we will lose only 3.5 percent of our high school students. But losing even one student is losing one too many—and let's face it—that so called small percentage of 3.5 translates into approximately 1,000 students, approximately 55 percent of whom are projected to be in the upper 10 percent of their classes. The waste taken as a whole is a disgrace and a sad loss of resources.

One last word about the School Excellence and Reform Act. In Vermont, we are currently witnessing, in one of our largest school districts, the unearthing of an apparent scandalous misuse of education moneys by school district officials. We can consequently support whole-heartedly the moneys going to the State level first, with the various accountability factors builtin—accountability not only in terms of dollars, but also of product. Indeed, while SERA says that the State may perform audits to verify local information, we would suggest the State shall perform such audits.

Thank you.

Senator STAFFORD. Thank you very much, Maida, for an excellent statement.

[The prepared statement of Ms. Townsend follows:]

Vermont-NEA

P.O. Box 54
Montpelier, Vermont 05602
(802) 223-6375

STATEMENT REGARDING

THE

AMERICAN DEFENSE EDUCATION ACT

AND THE

SCHOOL EXCELLENCE AND REFORM ACT

BEFORE THE

SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES

OF THE

UNITED STATES SENATE

PRESENTED BY

NAIDA F. TOWNSEND

PRESIDENT

VERMONT-NEA

JULY 25, 1985

An affiliate of the National Education Association

I am Maida F. Townsend, President of Vermont-NEA. As such, I represent 5,900 teachers and education support personnel in Vermont. As such, I come from a state in which the local property taxpayer has, for years now, picked up well over 60 percent of the cost of public education.

The historic commitment of Vermont's property taxpayers has been impressive, with impressive results. We have managed to maintain average to above-average per pupil expenditures. This past year, Vermont students achieved the second highest average SAT scores in the nation. Vermont had the fifth lowest high school dropout rate in the nation. Hazen Union High School in Hardwick, Vermont was chosen as one of the outstanding secondary schools in the nation; South Burlington High School was chosen as a model school for the nation. And, of course, one of Vermont's teachers was among the ten finalists for that ultimate field trip with NASA.

Yet despite Vermonters' historic support for our schools, very clear danger signals cropped up as we entered this past school year.

- West Rutland -- The school budget went to a fourth vote; there was a 30 percent turnover in staff.
- Colchester -- The school budget went to a third vote; elementary music and art were cut, as were four department chairpersons; a new math/science position was eliminated.
- Springfield -- The school budget went to a third vote; the budget passed was less than the budget for '83-'84 which was funded at the '82-'83 level; district funds for supplies, books, and equipment were cut approximately 28 percent; eliminated were an elementary physical education position, the high school woodworking program, and the positions of A-V Director and Reading Director for the district; two elementary schools were closed; at

any one time, over two hundred elementary students were on an asphalt "playground."

- Milton — The school budget went to a third vote; cut was one-half of the entire elementary program in art, music, library, and physical education; also lost at the elementary level were one-half of the nursing services and two special education aides; one elementary school was closed; in the high school, gone were one home economics position, one and a half industrial arts positions, one physical education position, one library position, and one-half of a nursing position; all junior high intramural sports were eliminated as were the hockey and gymnastics programs; eleven positions were still unfilled one week before school was due to open.

The Vermont property taxpayer is being bled dry by lack of a genuine partnership among the local, state, and federal governments. And we of Vermont-NEA dread the consequences in our schools if relief is not forthcoming, and soon. In Montpelier, we have asked that needed reform be addressed, and we have proposed legislation designed to implement such reform. Here in Washington, we ask that the federal government also do its fair share for our schools and support progressive public education initiatives.

The American Defense Education Act is such an initiative; and in terms of both dollars and method of distribution, ADEA contains many components which are attractive to Vermont educators. It provides a voluntary program for local districts based on incentives for improving quality of instruction in key disciplines such as mathematics, science, foreign languages, technology, and guidance. It provides local assessment of needs, followed by development of and evaluation of improvement programs. It provides ensured participation in such local responsibility

by not only all elements of each local education community but also of the larger community — parents, business, industry. It provides that the federal dollars to support improvement plans would supplement, not supplant, existing monies and that such dollars would flow directly from the federal level to the local level with a minimum of red tape and paper shuffling. And those dollars would not be insubstantial — Vermont alone could, in one year, receive approximately 4.5 million new federal education dollars, with the total bill nationwide being approximately $2 billion in the first year and essentially double that amount in subsequent years. It is by no means inexpensive, but we in Vermont believe our children are worth it; and we frankly need the help and we ask for it.

The School Excellence and Reform Act is yet one other initiative for which we urge your support. Indeed, we particularly recommend to you the School Excellence and Reform Act. It not only embodies the strengths of ADEA in its financial support of general improvement and excellence. SERA eliminates certain objections raised about ADEA while also including a component of aid targeted for supporting reform and equity in our schools.

Given the reality of the federal deficit, but equally the reality of the needs of our schools, we see as reasonable and wise the even split of SERA's $2 billion price tag -- $1 billion in support for efforts promoting general improvement and excellence, with $1 billion for efforts promoting reform and equity. We in Vermont particularly applaud the inclusion in the latter component of support for early childhood education, in-service teacher training, and dropout prevention.

For several years now, we have been working to establish state support for early childhood education. Indeed, it was only this past year, after a fifteen year effort, that Vermont finally made publicly funded kindergarten law and provided funds to support the law. As it was for kindergarten, it still is for early childhood education. Individual

parents or individual communities must be willing to and/or able to make the additional financial effort to provide early childhood education. And if a child is not fortunate enough to happen to live in such circumstances, that's "too bad." Those children who "have," have more; those who do not, remain behind the eight ball — and equal opportunity remains a myth.

We are equally sensitive to the need for support of in-service teacher training. Currently in Vermont, approximately one-half of one percent of local budgets is destined for professional development activities. While at the state level we have established what is called the In-Service Institute for Professional Development, it limps along at best — starved for funding. Out of a state budget nearing $400 million, our Legislature this past year could not see its way clear to budget $100 thousand for in-service teacher training. While we know that we are doing a good job in Vermont's classrooms, we know that we can do better — and we, the teachers, are quite literally crying out for in-service training which is not useless pap. SERA looks like a godsend in this regard.

And on the issue of dropout prevention .... In Vermont, our dropout rate has been inching downward over the past several years. It is projected that in the 1985-1986 school year, we will lose "only" 3.5 percent of our high school students. But to us, losing even one student is losing one too many — and let's face it, that small percentage of 3.5 translates into approximately one thousand students! An interesting sidelight, by the way, is that 55 percent of those we lose in Vermont are in the upper ten percent of their classes. The waste taken as a whole across the country is a national disgrace and a sad loss of resources. We within NEA have made a substantial financial commitment to stem that loss. We see SERA has a way in which the federal government could do its part in that effort.

One last word about SERA. We in Vermont are especially sensitive to and appreciative of the various accountability factors built in to ensure proper use of the resources provided by SERA — not only in the sense of the dollars per se but also, certainly, the "product." We are currently witnessing, in one of our largest school districts, the unearthing of what appears to be a scandalous misuse of education monies by school district administrators. We can consequently support wholeheartedly the monies going to the state level first, with the various checks and balances built in. Indeed while SERA says that the state "may" perform audits to verify local information, we would say that the state "shall" perform such audits. We would urge, nonetheless, that the red tape and paper shuffling which has become fairly synonymous with federal aid passed through the state be kept "under control."

Yes, we ask unabashedly that the federal government support progressive public education initiatives such as the American Defense Education Act and the School Excellence and Reform Act. With 90 percent of our children being educated in public schools, it cannot reasonably be denied that Vermont's strength -- that every state's strength -- indeed the nation's strength — depends upon ensuring, for every child, both quality educational opportunity and equality of educational opportunity. For the federal government or the state government to continue to say, "We just can't or won't do it; you folks at the local level will just have to do the best you can," that would be not only incredible, but unconscionable.

Senator STAFFORD. Now, Peg, we will be glad to hear from you.

Ms. PORTSCHELLER. You have saved the best until last, Senator.

Senator STAFFORD. I should have said that, and it occurred to me, but then how would I square that with Maida and Mary? [Laughter.]

Ms. PORTSCHELLER. Thank you, Senator. It is a pleasure indeed to join my Vermont counterpart and my national president before you today. It is especially a privilege for me to join the two distinguished Senators from my home State, North Dakota.

I would personally like to thank you, Senator Stafford, not only for the opportunity to appear before you and your subcommittee today, but also for your fine support of education throughout the past years.

Senator STAFFORD. Thank you, Peg.

Ms. PORTSCHELLER. As you know, Senator Stafford and members of the subcommittee, I come from a State that is definitely one of the most rural States in this Nation. North Dakotans know what it means when we are told to, do the best we can with what we have, and we certainly have done that in elementary and secondary education in the State of North Dakota, and we have a school system of which we are indeed very proud. Among our successes, we can count a high retention rate. I believe that North Dakota has the lowest dropout rate in the country. We have a very high proportion of high school graduates. Our students test out with higher-than-average test scores, and we have a very high percentage of our students who choose to go on to enroll in colleges and universities.

But as Maida mentioned of Vermont, we do know that we have a system that can be made better. We know that we can answer the public's desire for more excellence in education.

The problem is, we also know that we cannot do our best in developing educational excellence programs when we do not have the funding to do that.

I am here to say that we do indeed need the Federal Government's help, because our State legislature was unable to provide funding for educational excellence in the State of North Dakota. We failed to obtain one dime during the recent 1985 legislative session, even though we did offer the legislature a very good, workable program, which we called the Merit Schools plan. I can tell you now why we did not get any money for the program.

It would have cost our State up to $41 million over the next 2 to 4 years to fund the program. There were other pieces of educational legislation also, requesting amounts ranging from $250,000 to $10 million, all of which would have helped provide funds for educational excellence. I am sorry to tell you that all of those plans went down to defeat.

In addition to that, those of us in the educational community in our State had to battle to prevent a drastic cut in our basic School Foundation Program. This program provides State aid to public elementary and secondary schools.

As it ended up, we received a minimal 5-percent increase in State aid and education over the next two—and I emphasize two—school years, in the State of North Dakota. Even with that minimal increase, North Dakota schools will be funded at the same per-

pupil Foundation Program payment that we received for the 1981-82 school year.

I am sorry to tell you that we cannot fund excellence programs on that kind of a regressive budget, no matter how hard we try.

One of the alternatives to State aid to education is, of course, local aid. As you all know, I am talking about local taxes. And, Mr. Chairman, we are having no more luck raising local taxes than Congress is trying to deal with the budget deficit.

At the outset, I mentioned that I was from one of the most rural States, and of course, in the United States, that means agriculture. All of you in the room know how bad off that sector of the economy is at the present time.

Some of the most recent statistical studies in the State of North Dakota indicate that from 5,000 to 7,000 of our farms and ranches could go out of business in the next 3 to 5 years—5,000 to 7,000 farms. That is nearly 20 percent of all of our farm and ranch enterprises.

That is the dim outlook we face in the future. Statistics already show that we have already lost 10 percent of our farms and ranches from the 1978 to 1982 period. That study also showed at least 40 percent of our State's farmers and ranchers are receiving too little income to meet their expenses.

The rippling effect of that stifled farm economy does not take long to affect our school systems, particularly our rural schools. And it is our rural schools that are most in dire need of excellence programs.

Some of you know, too, that North Dakota depends heavily on oil production and extraction taxes to bolster our State revenues. For each $1 per barrel that oil prices drop, our State's oil production drops $10 million. As you know, oil prices are going down.

We argue with our State legislators about more educational funds, but we also understand the old adage that "You can't get blood out of a turnip." The revenues just are not available, and the economy cannot provide more.

As I speak to you know, our Governor, George Sinner, is back in Bismark, trying to cut $100 million out of our 1987 to 1989 biennial budget. That may not sound like all that much around these halls, but back home it means the difference between a 4-percent and a 7-percent sales tax.

National studies over the past 2 years have created a public concern about excellence in the schools, and I think the public does expect some action. Unfortunately, the financial burden of fueling the educational reform movement has been left to State and local government levels. We cannot get those funds from the State and local level in my situation. We must depend on a partnership with the Federal Government to accomplish what the people of our State and Nation are requesting.

We think the American Defense Education Act provides the vehicle for that sort of Federal partnership. North Dakota would qualify for the small States guarantee of $5 million under this legislation. We feel this will help us provide a more positive answer to the problem of developing an excellence program. That is the kind of answer we desperately need at this time.

And if you will allow me to steal a quote from a recent edition of Newsweek, "We do not see any other answer blowing in the wind."

We ask the support, Mr. Chairman, of your subcommittee for the American Defense Education Act, and I thank you for the opportunity to be here today.

Senator STAFFORD. Thank you very much indeed.

[The prepared statement of Ms. Portscheller follows:]

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STATEMENT REGARDING

THE

AMERICAN DEFENSE EDUCATION ACT

AND THE

SCHOOL EXCELLENCE AND REFORM ACT

BEFORE THE

SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES

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UNITED STATES SENATE

Presented by

Peg Portscheller

President

North Dakota Education Association

July 25, 1985

Mr. Chairman, I come from a state that is known as one of the most rural states in the nation. North Dakotans know what it means when they're told to "do the best you can with what you have." We've done that in education and we have an elementary and secondary school system of which we are proud.

Among our successes we can count a high retention rate and high proportion of high school graduates, higher than average student test scores and a high percentage of students that enroll in colleges and universities.

But we know we can make our system better--we know we can answer the public's desire for more excellence in education.

The problem is, Mr. Chairman, we also know we can't do our best in developing education excellence programs when we don't have any funds for that development. I'm here to say we need the federal government's help because our state legislature was unable to provide funding for education excellence. We failed to obtain one dime during the recent 1985 legislative session, even though we offered our legislature a very good, workable program called "Merit Schools."

I can tell you now why we didn't get it. It could have cost the state up to $41 million over the next two to four years.

There were other pieces of education legislation requesting amounts ranging from a mere $250,000 up to $10 million--all of which would have helped provide more excellence in education.

I'm sorry to tell you they all went down to defeat.

In addition to that, we educators had to battle to prevent a drastic cut in our School Foundation Program which provides state aid to public elementary and secondary schools.

As it ended up, we received a minimal five percent increase in state aid to education for the next two--and I emphasize two--school years. Even with that minimal increase, North Dakota schools will be funded at the same $1,425 per pupil Foundation Program payment that we received for the 1981-82 school year.

I'm sorry to tell you we can't fund new education excellence programs on that kind of regressive budget--no matter how hard we try.

One of the alternatives to state aid to education is, of course, local aid to education. As you all know I'm talking about local taxes. Mr. Chairman, we're having no luck raising local taxes than you are trying to cut the $205 billion federal budget deficit.

I told you at the outset that I live in one of the most rural states in the nation. That means agriculture, and I believe you know more than I do how bad off that sector of the economy is at present.

Some of the more recent statistical studies produced by North Dakota State University indicate that from 5,000 to 7,000 of North Dakota's 36,000 farms and ranches could go out of business in the next three to five years.

That's nearly 20 percent of the farm or ranch enterprises. That's the dim outlook for the future. Statistics already show that North Dakota lost nearly 10 percent--or 4,000 farms and ranches--from the 1978 to 1982 four-year period. That study also showed at least 40 percent of state farmers and ranchers are receiving too little income from their crops to meet their various living and business expenses.

The rippling effect of our stifled farm economy doesn't take long to affect our rural schools. And it's most of our rural schools that are in dire need of excellence programs.

Some of you may know that North Dakota depends heavily on oil production and extraction taxes to bolster state revenues. For each one dollar per barrel that oil prices drop, our state's oil production revenue drops $10 million. As you know, oil prices are going down.

We argue with our legislators about more educational funds, but we also understand all the old adages about not getting blood out of a turnip. The revenues are just not available--the economy cannot provide more.

As I talk with you today, our Governor is back home trying to cut $100 million out of North Dakota's 1987 to 1989 biennial budget. I know that $100 million figure isn't all that impressive around these halls. Let me tell you, however, back home it could mean the difference between a four percent and a seven percent state sales tax.

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National studies over the past two years have created a public concern about excellence in the schools. The public expects some action. Unfortunately the financial burden of fueling the educational reform movement has been left to governments at the state and local level.

We can't get those funds on the state and local level. We must depend on a partnership with the federal government to accomplish what the people of our state and nation are requesting.

We think the ADEA-SERA provides the vehicle for that federal partnership. North Dakota will qualify for the small states guarantee of $5 million under this legislation. We feel this will help us provide a positive answer to our problem of developing an education excellence program. That's the kind of answer we desperately need at this time.

And if you'll allow me to steal a quote from Newsweek and a song of the 1960's, Mr. Chairman: "We don't see any other answer blowing in the wind."

Senator STAFFORD. Senator Simon, do you have to leave?

Senator SIMON. I am going to have to leave, Mr. Chairman.

Senator STAFFORD. I would yield to you, then, to go ahead with some questions.

Senator SIMON. I do not have any questions right now. Let me just express my appreciation to all of you for your leadership, particularly Mary Futrell, with whom I have worked on a variety of things. While I have not had the good fortune to meet the leaders from North Dakota and Vermont, we appreciate what you are doing there, too.

I look forward to working under the leadership of Senator Stafford with Senator Andrews and Senator Burdick and moving ahead in this area.

Thank you, Mr. Chairman.

Senator STAFFORD. Thank you very much, Paul. We really appreciate your being here this afternoon.

I do have a few questions I would like to address to the panel. And to put this one in perspective—Mary, I am going to direct it to you—but to put it in perspective you know, I am often chagrined to realize that in the early part of this year, when we were righting over preserving the educational programs we have got as they are against considerable opposition. I remember that the total Federal budget for education in this country approximately equalled the difference between what most of the Senate wanted to spend on defense in terms of just an increase over last year, and what the administration wanted to spend; just the total increase proposed ini-

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tially was approximately double the entire funds we have available for all the educational programs that we support here at the Federal level. And we had a hard time to keep that level of funding, as you know. But, thanks to Mark Andrews and others, we did.

My question is how much would SERA or ADEA, whichever is the appropriate title now, how much would you guess that might cost in the course of a year?

Mrs. FUTRELL. Well, we are projecting that it would cost about $2 billion the first year, and then the figures for the subsequent years would be left open, depending upon need and also depending upon progress made by the various States participating in the program the first year. We are projecting for the 1987 fiscal year, $2 billion.

Senator STAFFORD. Two billion dollars. Thank you very much.

Could you describe the ADEA or SERA's method of distribution for funding as it is contained in the bill?

Mrs. FUTRELL. If you don't mind, I would like to defer to Linda Tarr-Whelan regarding your question, because she has worked much more closely with it than I have.

Senator STAFFORD. All right. Any questions I ask that you would rather answer in writing, that is perfectly agreeable as well.

Ms. TARR-WHELAN. We can do that, Senator, if your time is short, but just quickly, there are two different titles in SERA—and that is a Spanish term meaning "It will be" so we like that better than some other pronunciation—the distribution is different in the two parts. The part that is distribution of general aid for school excellence would be distributed in a formula so that school districts with a large number of chapter 1 students would receive an increased amount over those school districts which do not have a lot of chapter 1 students in them.

The second section, which deals with excellence and reform, the funds would be distributed to the States, and then from there to the districts, based upon those districts which needed the funds the most to deal with the problems which are listed in the bill—those school districts which had higher absenteeism, higher dropout rates, and wanted to work on those problems.

In all cases, the distribution is not an automatic one. The school district must want to participate in this program in order to receive funds.

Senator STAFFORD. Thank you very much. As you have described it, with two SERAs and the precedent having been set for quoting a song, you make me think that maybe the title should be, "Que sera, sera."

Maida, you said that the School Excellence and Reform Act eliminates certain objections raised about the American Defense Education Act. Could you tell us briefly how the new proposal addresses these objections?

Ms. TOWNSEND. One objection which has been raised in the past is the dollars needed to finance ADEA—ADEA would be approximately $2 billion in the first year and double that thereafter. As Mary has already explained, with the School Excellence and Reform Act, it is essentially a $2 billion pricetag in the first year, and then a pricetag based on needs thereafter.

There is also the fact that in the School Excellence and Reform Act, the accountability measures are, shall we say, much more spe-

cific as contrasted with perhaps more amorphous accountability measures built into the original ADEA.

Senator STAFFORD. Thank you very much, Maida.

Peg, where do you see the greatest need in the North Dakota public schools for extra Federal funds?

Ms. PORTSCHELLER. I would say, Senator Stafford, as a 15-year classroom teacher, that I would see for our particular needs, some work in the math and science area and in the technology area.

Senator STAFFORD. Thank you.

Mary, how much discretion would the Secretary of Education have in the administration of the American Defense Education Act or the School Excellence and Reform Act programs?

Mrs. FUTRELL. You say how much flexibility as far as distribution of the funds?

Senator STAFFORD. Yes; how much discretion would the Secretary have in the handling of the funding?

Mrs. FUTRELL. Well, based on the way the program has been outlined, he would be given direction as to how the money would be spent and would be expected to follow that particular formula. However, the Congress has the right to change the formula and to be more definitive or restructive in spelling out how the funds are to be expended.

Senator STAFFORD. We might have to consider who was the Secretary of Education.

Mrs. FUTRELL. That is true.

Senator STAFFORD. Mary, how does the School Excellence and Reform Act demand accountability from State and local education agencies?

Mrs. FUTRELL. Well, one of the ways it demands accountability, as outlined in the original proposal, we had basically proposed to bypass the State and to go directly to the local school districts. What we are proposing now is that the State would be directly involved in the receipt of and the distribution of the funds, based on the number of program proposals which are presented and which ones are approved. That is one of the ways to assure accountability. State officials would be able to go to a local school district and conduct audits, if they felt that there was a need to do so. In Virginia, for instance, we have 100 counties. They might decide to sample 10 or 20 percent of those and conduct audits on them. The school districts would also have to prove to the State Department of Education progress has been made with reference to the problems that were being addressed: If we are talking about absenteeism, or dropouts or improving the math, science, or technology education areas of the school systems, the affected school districts would have to show that they have actually made progress.

Senator STAFFORD. Thank you very much.

Maida, there are predictions of a dangerous deterioration of the teaching force in our State of Vermont, as well as throughout the country. Talented individuals with scarce skills, such as in science and mathematics, are chosing not to enter teaching, or they are leaving schools to accept higher-paying opportunities outside of education. What effect, in your judgment, would the proposals in SERA and the ADEA have on this problem?

Ms. TOWNSEND. To begin with, I would see the additional support from the Federal Government as not only a statement of philosophical leadership, but financial leadership, which points to the importance of education overall, which would then translate to the State level.

Now, looking at the setting, if you will, in which teachers do work, having the additional financial as well a philosophical support would change in great proportion, I believe, the atmosphere in which people are currently struggling to do their best with children.

Mrs. FUTRELL. May I also answer that?

Senator STAFFORD. Yes.

Mrs. FUTRELL. One of the things that I like about the ADEA is the fact that it is designed so that local school districts can assess their needs. If there is a need to train teachers in a certain area, then they would develop a program proposal and then apply for funding. So, for instance, Peg talked about a shortage in the areas dealing with technology or dealing with math and science; someone else talked about foreign languages. If there was a need to have teachers trained in those areas or to receive additional training, they could apply under this program for the funds to do that.

Senator STAFFORD. Well, ladies, thank you very much. You are very persuasive, and when you add Linda Tarr-Whelan to the ensemble, almost overwhelming.

A very valuable member of our committee has just arrived. Chris, do you have an opening statement or comments or questions?

Senator DODD. I do have an opening statement, Mr. Chairman, but in the interest of time, let me first of all apologize to you and of course to our panel of witnesses. As I am sure all of you are painfully aware, we end up trying to be in six different places at once, and we had a series of nominations before the Foreign Relations Committee for very important ambassadorial posts, and I had to be present for those. So I apologize to all of you.

I would just ask, Mr. Chairman, unanimous consent that my statement be included in the record.

Senator STAFFORD. Without objection, we will make your statement a part of the record.

Senator DODD. This is the first time we have had a chance to hold hearings on ADEA, and I am grateful to you, along with many others, for the opportunity. So for that, and I do not need to embellish on the data and information, we are so fortunate in this body and in this country to have you as chairman of this committee. You have been such an advocate for education for so many years, and I am a newcomer to it. I have got a lot to learn at this fellow's side, and I am grateful for your backing and support. So, I would just make my statement a part of the record.

Senator STAFFORD. Thank you for your gracious words.

[The prepared statement of Senator Dodd follows:]

STATEMENT OF SENATOR CHRISTOPHER J. DODD

SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES

JULY 25, 1985

MR. CHAIRMAN, AS A COSPONSOR OF THE AMERICAN DEFENSE EDUCATION ACT (ADEA), I WANT TO THANK YOU FOR HOLDING TODAY'S HEARING ON THIS IMPORTANT LEGISLATIVE PROPOSAL. WHILE ADEA WAS BROUGHT TO THE FLOOR OF THE HOUSE OF REPRESENTATIVES LAST YEAR, THIS IS THE FIRST OPPORTUNITY THAT THE SENATE HAS HAD TO HEAR FIRST HAND TESTIMONY CONCERNING THIS PROPOSAL.

I NEED NOT REMIND MY COLLEAGUES OF THE ALARMING CONCLUSION REACHED BY THE NATIONAL COMMISSION ON EXCELLENCE IN EDUCATION JUST TWO SHORT YEARS AGO. IN ITS FINAL REPORT, "A NATION AT RISK: THE IMPERATIVE FOR EDUCATIONAL REFORM," THE COMMISSION STATED THAT "THE EDUCATIONAL FOUNDATIONS OF OUR SOCIETY ARE PRESENTLY BEING ERODED BY A RISING TIDE OF MEDIOCRITY THAT THREATENS OUR VERY FUTURE AS A NATION AND A PEOPLE."

TODAY, DESPITE RECENT EDUCATIONAL REFORM EFFORTS AT THE STATE AND LOCAL LEVELS, THIS "TIDE OF MEDIOCRITY" IS STILL RISING. THIS HOLDS ESPECIALLY TRUE IN THOSE DISCIPLINES MOST IMPORTANT TO OUR NATIONAL SECURITY AND ECONOMIC PROSPERITY: MATHEMATICS, THE SCIENCES, COMMUNICATIONS, TECHNOLOGY, AND FOREIGN LANGUAGES. FOR EXAMPLE, ONE-HALF OF ALL HIGH SCHOOL STUDENTS IN THE UNITED STATES TAKE NO MATHEMATICS OR SCIENCE BEYOND THE 10TH GRADE. IN THE SOVIET UNION, STUDENTS MUST COMPLETE 2 YEARS OF CALCULUS, 5 YEARS OF PHYSICS, 4 YEARS OF CHEMISTRY, 4 YEARS OF BIOLOGY, AND 5 YEARS OF ALGEBRA BEFORE THEY RECEIVE THEIR HIGH SCHOOL DIPLOMAS.

I SUBMIT THAT WE CAN NO LONGER AFFORD TO PREPARE OUR CHILDREN INADEQUATELY FOR THE CHALLENGES THEY WILL FACE IN THE DECADES AHEAD. IN MY VIEW, NATIONAL SECURITY MEANS MORE THAN BUILDING MISSILES AND BOMBERS; A WELL-TRAINED AND EDUCATED CITIZENRY IS JUST AS IMPORTANT TO OUR COUNTRY'S DEFENSE AS THE DEVELOPMENT AND PROCUREMENT OF ADVANCED MILITARY HARDWARE.

THE AMERICAN DEFENSE EDUCATION ACT RECOGNIZES THAT STATES AND LOCALITIES HAVE NEITHER THE RESOURCES NOR THE INCENTIVE TO MEET OUR NATIONAL EDUCATIONAL NEEDS WITHOUT THE INVOLVEMENT OF THE FEDERAL GOVERNMENT. ADEA WOULD PROVIDE FINANCIAL ASSISTANCE TO LOCAL SCHOOL DISTRICTS FOR THE IMPROVEMENT OF TEACHER INSTRUCTION AND STUDENT ACHIEVEMENT IN MATHEMATICS, THE SCIENCES, COMMUNICATIONS SKILLS, TECHNOLOGY, AND FOREIGN LANGUAGES. LOCAL DISTRICTS WOULD DEVELOP AND IMPLEMENT THEIR OWN PROGRAMS AND WOULD BE ELIGIBLE FOR BONUS PAYMENTS IN SUCCEEDING YEARS IF THEY CAN SHOW IMPROVEMENT IN THESE SUBJECT AREAS. ADEA, LIKE ALL FEDERAL SPENDING PROPOSALS, MUST BE EVALUATED IN LIGHT OF THE NEED TO REDUCE FEDERAL DEFICITS. HOWEVER, WHILE THE COST OF IMPLEMENTING THIS LEGISLATION WOULD BE HIGH, WE MUST BALANCE THIS COST AGAINST THE PRICE WE WILL PAY IF WE MAINTAIN OUR PRESENT EDUCATIONAL COURSE.

I UNDERSTAND THAT SEVERAL OF THE WITNESSES TESTIFYING TODAY WILL COMMENT ON LEGISLATION SIMILAR TO ADEA WHICH WAS RECENTLY INTRODUCED IN THE HOUSE BY REPRESENTATIVE AUGUSTUS HAWKINS, CHAIRMAN OF THE HOUSE EDUCATION AND LABOR COMMITTEE. THIS MEASURE, THE SCHOOL EXCELLENCE AND REFORM ACT (SERA), INCORPORATES THE SAME "EXCELLENCE AND IMPROVEMENT" PROVISIONS INCLUDED IN ADEA AS WELL AS A "REFORM AND EQUITY" PROVISION WHICH WOULD TARGET AID SPECIFICALLY FOR PROGRAMS LIKE EARLY CHILDHOOD EDUCATION, DROPOUT PREVENTION, AND SECONDARY SCHOOLS BASIC SKILLS DEVELOPMENT. SERA WOULD BE LESS COSTLY THAN ADEA TO IMPLEMENT AND WOULD HELP ENSURE THE INCLUSION OF HISTORICALLY UNSERVED OR UNDERSERVED CHILDREN IN THE EDUCATIONAL EXCELLENCE MOVEMENT.

I AM VERY INTERESTED IN SERA AND AM SERIOUSLY CONSIDERING INTRODUCING THIS LEGISLATION IN THE SENATE NEXT WEEK. HOWEVER, BEFORE MAKING A FINAL DECISION ON THE MERITS OF THIS PROPOSAL, I FELT IT WOULD BE WISE TO HAVE THE BENEFIT OF THE THOUGHTS PRESENTED AT THIS HEARING BY OUR WITNESSES AND BY MY COLLEAGUES ON THE SUBCOMMITTEE.

MR. CHAIRMAN, THE ESSENTIAL QUESTION BEFORE US TODAY IS: WHAT IS THE PROPER ROLE FOR THE FEDERAL GOVERNMENT IN THE IMPROVEMENT OF TEACHER INSTRUCTION AND STUDENT ACHIEVEMENT IN CRITICAL SUBJECT AREAS? THROUGH THE PASSAGE OF LEGISLATION LIKE THE NATIONAL DEFENSE EDUCATION ACT OF 1958 AND THE EDUCATION FOR ECONOMIC SECURITY ACT OF 1984, CONGRESS HAS ALREADY RECOGNIZED THAT THE NATIONAL INTEREST REQUIRES FEDERAL INVOLVEMENT AND ASSISTANCE. IT IS NOW UP TO US TO DETERMINE WHETHER TO EXPAND OR TO SIMPLY MAINTAIN THE CURRENT LEVEL OF FEDERAL INVOLVEMENT IN THE CONTEXT OF TWO COMPETING INFLUENCES: THE NEED FOR EDUCATIONAL EXCELLENCE AND REFORM VERSUS THE NEED TO REDUCE THE FEDERAL DEFICIT. IN SO DOING, WE MUST ALWAYS KEEP IN MIND THAT FEDERAL EDUCATION PROGRAMS ARE NOT SPENDING BUT INVESTMENT PROGRAMS: INVESTMENT IN THE FUTURE OF OUR NATION.

Senator STAFFORD. Thanks to all of you who have appeared in front of us in the panel. We appreciate it very much indeed.

We have one more witness today, and we are very happy on behalf of the Committee to welcome Dr. Richard Long, who is the Washington representative of the International Reading Association.

Dr. Long, we are very happy you are here, and we would be pleased at this point to hear your testimony.

STATEMENT OF DR. RICHARD LONG, WASHINGTON REPRESENTATIVE, INTERNATIONAL READING ASSOCIATION, WASHINGTON, DC

Dr. LONG. Thank you, Mr. Chairman.

I appreciate the opportunity to present the International Reading Association's views on the American Defense Education Act and the SERA and the needs of effectively meeting the needs of children across the Nation.

The International Reading Association is a professional society of roughly 60,000 members, with 1,180 affiliate councils, with members in well over 80 countries.

We have been concerned with the direction of American education, and I would like to just briefly summarize my written statement for the committee.

The National Assessment of Education Progress [NAEP], data has indicated that children have made great progress in education over the last decade. However, this has not been nearly enough to meet the needs of our changing environment. In fact, our environment has been changing so rapidly that if a soldier during World War I had the same literacy skills in World War II, our Army probably would not have marched to victory. Indeed, today, if soldiers tried to have the same literacy that they did during World War II, our Nation would similarly be at peril.

During World War II, the mainline fighter aircraft had a manual of 36 pages. Today, the Navy's mainline fighter aircraft manual is well over 36,000 pages, and some have said indeed requires a degree in physics to comprehend.

One of the other concepts that I think the committee should take into consideration when looking at a comprehensive bill is not only what the present looks like, but what the future looks like. Daniel Boornstin's eloquent book, "The Discovers", talked in terms of how man has begun to measure time and how that has contributed to changes in this environment. Ten years ago, the concept of a millisecond was only something in a library. Today, children are having to learn how to handle the concept of real time and simultaneous or manipulated time—a concept that you and I in the educational experience did not have to know about.

However, while the future is changing, so is American education changing. There is a reform movement sweeping the land that the other witnesses have discussed. This reform movement, however, has not been including all of the children in school today. Many schoolchildren are being systematically left out of this reform movement because funding simply is not available. State legislators

in their wisdom have been expanding the school day, not paying attention to how to improve the quality of American education.

Indeed, the reform movement is creating a serious number of problems. Among these problems are that students who are educationally at risk of failure are being left behind; those making reforms are not always paying for them, and there is a need to address how these changes can be integrated across every student's needs, so it just does not become one more trend that, a few years from now, we will have to talk about again.

One of the strengths of the American Defense Education Act, I believe, is that the ADEA and its successor bills might provide a stable base for future planning. Planning in this country in terms of education has usually been done on a piecemeal basis. Specifically, this means that local educators are not really sure where the money is going to come from in longer than a 1-year time duration. This means that if they have to make a decision about changing a deteriorating physical plant or a curriculum, if it takes longer than 1 year, they may not be able to fund it.

The recent publication, "On Becoming a Nation of Readers", recommended 17 major changes. I have attached to my testimony a summary of these recommendations—simple ones, like encouraging teachers to use more trade books as part of their educational experience to improve reading and literacy education in this country, take time and money to implement changes in the curriculum. A program like ADEA would give teachers time and ability to do some planning. Indeed, more complex recommendations, like asking teachers to generate new and better educational materials, requires the same kind of energy that right now is lacking in the educational system.

The flexibility in local planning that a program like ADEA would provide would allow teachers to be able to work on programs involving dropout prevention, early childhood education, school daycare, in-service education, and improvement in secondary school basic skills programs. The fact is, that many of these same programs have been the ones placed in jeopardy by the recent rash of budget cuts during the last 5 years.

The remedial reading specialist, for example, a professional who has been providing in-service education to other teachers and in-depth remedial services to secondary school students, has become almost extinct in many schools because of the funding cutbacks. ADEA would provide a secure funding base for secure, long-term planning.

Thank you for the opportunity to testify.

[The prepared statement of Dr. Long follows:]

The testimony of

THE

INTERNATIONAL READING ASSOCIATION

on

S-177, the American Defense Education Act

before

the Senate subcommittee on

EDUCATION, ARTS AND THE HUMANITIES

SENATOR ROBERT STAFFORD, CHAIRMAN

JULY 25,1985

Mr. Chairman and members of the Committee, I am Richard Long, Washington Representative of the International Reading Association. I would like to thank the Committee for the opportunity to testify today. The International Reading Association is a professional education society of over 60,000 members and 1180 affiliate councils in more than eighty countries throughout the world. Our members are interested in reading, reading education and literacy, so that individuals may be free to develop their own abilities, values, and thoughts. I am testifying on S. 177, the American Defense Education Act (ADEA) and the goals of reaching more children with effective educational services.

American education has made significant improvements during the past ten years. The National Assessment of Education Progress (NAEP) data indicates that many children have made significant gains in their reading. However, these gains are not enough. American education must continue to improve as a system so that more individuals may benefit. However, while progress has been made to provide better education to more students, the demands of the workplace and society have changed. The demands to be educated have progressed with each passing decade. The World War I soldier did not need the same literacy skills as his World War II counterpart; and today the demands to be literate continue to grow. In fact, during World War II a seaman mechanic working on the Navy's main fighter aircraft only needed to understand a 36 page manual. Today's seaman needs to work with a

manual that is in excess of 36,000 pages. The demands of society for literacy skills are only expanding.

The future holds other demands for change as well, Daniel Boorstin's book THE DISCOVERERS opens with a chapter on time. His work eloquently describes man's push to measure time as a factor to develop trade. Ten years ago milliseconds were laboratory concepts, while today time is being seen as real or current time, and manipulated or simultananeous time by young children. The schools need to be able to adapt to these new concepts.

Technology has also built other problems. Teenagers no longer need to be able to read and compute to hold many jobs. Fast food resturants have been able to build cash registers with pictures instead of numbers, and voice synthesizers are quickly becoming inexpensive enough so that instructions may be given via an oral computer command. The environment is changing, in a two fold direction that education has to meet; building skills and concepts so that education is valuble to the students.

Presently, education in the United States is currently undergoing a massive and systematic change. The reform movement, stimulated by the many national reports on education and excellence, has sparked the public's concern for education and the future of the country. The reform movement is aimed at improving standards for graduation from high school, expanding instructional time, building greater emphasis on academic subjects, and creating longer school days and years. All of this

takes planning, stable resources and the freedom to be creative.

But, the reform movement is also creating a series of problems. These problems are: 1) students who are educationally "at-risk" of failure may be left behind, 2) those making the reforms are not always paying for them, and 3) poor quality schools having a longer school day will not necessarily mean improvements in the schools' program. Specifically, many state governments have been passing requirements that students spend more time in school, without improving the educational environment. Many states have increased the academic requirements for graduation and thus, reduced the options for many students to succeed in vocational or technical training programs. And, students who were considered educationally "at-risk" of failure before the reform movement are not included as part of the reform movement. Students who are "at-risk" need teachers with specialized training, frequently in reading and mathematics instruction, study skill building and a well coordinated curriculum.

For the reform moverment to succeed and not simply be a trend, a new emphasis on planning for a stable broad based system of change that includes the needs of all students will have to occur. In the United States there are sixteen thousand school districts and many teacher training institutions. Planning in this nation is usually done on a piecemeal, poorly funded short term basis. Specifically, this means that local educational leaders have a difficult time planning change. Especially when change involves deteriorating physical plant, or an updated

curriculum -- if more then one year is required. The advantage of the ADEA is that it provides a different set of notions for local planning. It sets into motion the ability of local educators to plan, design and implement change on a long term basis.

BECOMING A NATION OF READERS, the recent report of the National Academy of Education and the Center for the Study of Reading outlined 17 major recommendations for improving the literacy and educational levels of the nation (a copy of the recommendations are attached). A simple recommendation like using trade books as part of a classroom requires time, effort, direction and coordination -- such improvements will not simply happen on their own. More complex recommendations like teachers using better materials and less workbook directed instruction will take more time to develop.

ADEA provides a great deal of flexibility for planning and program development for the local schools. Areas of need include: dropout prevention, early childhood education, school day care, inservice teacher education and improvement of secondary schools basic skills instruction. In fact, during the time period of the recent cuts in education almost all of these areas have been adversely affected. The reading specialist, a professional who provides in-depth remedial education, program development and consultation has suffered badly during the recent cuts to education funding. ADEA would provide a secure funding base for local educational leaders to effectively plan program improvements that require many years.

4

America will become a nation of readers when verified practices of the best teachers in the best schools can be introduced throughout the country.

Becoming a Nation of Readers: Recommendations

The more elements of good parenting, good teaching, and good schooling that children experience, the greater the likelihood that they will achieve their potential as readers. The following recommendations encapsulate the information presented in this report about the conditions likely to produce citizens who read with high levels of skill and do so frequently with evident satisfaction.

Parents should read to preschool children and informally teach them about reading and writing. Reading to children, discussing stories and experiences with them, and — with a light touch — helping them learn letters and words are practices that are consistently associated with eventual success in reading.

Parents should support school-aged children's continued growth as readers. Parents of children who become successful readers monitor their children's progress in school, become involved in school programs, support homework, buy their children books or take them to libraries, encourage reading as a free time activity, and place reasonable limits on such activities as TV viewing.

Preschool and kindergarten reading readiness programs should focus on reading, writing, and oral language. Knowledge of letters and their sounds, words,

stories, and question asking and answering are related to learning to read, but there is little evidence that such activities as coloring, cutting with a scissors, or discriminating shapes (except the shapes of letters) promote reading development.

Teachers should maintain classrooms that are both stimulating and disciplined. Effective teachers of reading create a literate classroom environment. They allocate an adequate amount of time to reading and writing, sustain children's attention, maintain a brisk pace, and keep rates of success high.

Teachers of beginning reading should present well-designed phonics instruction. Though most children today are taught phonics, often this instruction is poorly conceived. Phonics is more likely to be useful when children hear the sounds associated with most letters both in isolation and in words, and when they are taught to blend together the sounds of letters to identify words. In addition, encouraging children to think of other words they know with similar spellings, when they encounter words they cannot readily identify, may help them develop the adult strategy of decoding unknown words by analogy with ones that are known. Phonics instruction should be kept simple and it should be completed by the end of the second grade for most children.

Reading primers should be interesting, comprehensible, and give children opportunities to apply phonics. There should be a close interplay between phonics instruction and reading words in meaningful selections. But most primers contain too few words that can be identified using the phonics that has already been taught. After the very earliest selections, primers should tell complete, interesting stories.

Teachers should devote more time to comprehension instruction. Teacher-led instruction in reading strategies and other aspects of comprehension promotes reading achievement, but there is very little direct comprehension instruction in most American classrooms.

Children should spend less time completing workbooks and skill sheets. Workbook and skill sheet activities consume a large proportion of the time allocated to reading instruction in most American classrooms, despite the fact that there is little evidence that these activities are related to reading achievement. Workbook and skill sheet activities should be pared to the minimum that actually provide worthwhile practice in aspects of reading.

Children should spend more time in independent reading. Independent reading, whether in school or out of school, is associated with gains in reading achievement. By the time they are in the third or fourth grade, children should read independently a minimum of two hours per week. Children's reading should include classic and modern works of fiction and nonfiction that represent the core of our cultural heritage.

Children should spend more time writing. Opportunities to write more than a sentence or two are infrequent in most American elementary school classrooms. As well as being valuable in its own right, writing promotes ability in reading.

Textbooks should contain adequate explanations of important concepts. Textbooks in science, social studies, and other areas should be clearly written, well-organized, and contain important information and concepts. Too many of the textbooks used in American classrooms do not meet these standards.

Schools should cultivate an ethos that supports reading. Schools that are effective in teaching reading are characterized by vigorous leadership, high expectations, an emphasis on academic learning, order and discipline, uninterrupted time for learning, and staffs that work together.

Schools should maintain well-stocked and managed libraries. Access to interesting and informative books is one of the keys to a successful reading program. As important as an adequate collection of books is a librarian who encourages wide reading and helps match books to children.

Schools should introduce more comprehensive assessments of reading and writing. Standardized tests should be supplemented with assessments of reading fluency, ability to summarize and critically evaluate lengthy selections, amount of independent reading, and amount and quality of writing.

Schools should attract and hold more able teachers. The number of able people who choose teaching as a profession has declined in recent years. Reversing this trend requires higher admissions standards for teacher education programs, stronger standards for teacher certification, improved working conditions, and higher teachers' salaries.

Teacher education programs should be lengthened and improved in quality. Prospective elementary teachers do not acquire an adequate base in either the liberal arts and sciences or in pedagogy. They get only a fleeting introduction to the knowledge required for teaching reading. Teacher education programs should be extended to five years and the quality and rigor of the instruction should be increased.

Schools should provide for the continuing professional development of teachers. Schools should have programs to ease the transition of novice teachers into the profession and programs to keep veteran teachers abreast of advancing knowledge.

America will become a nation of readers when verified practices of the best teachers in the best schools can be introduced throughout the country.

CHAPTER 2

THE READING PERFORMANCE OF 9-YEAR-OLDS: NATIONAL AND GROUP RESULTS

National Results

The results of the third national assessment of 9-year-olds' reading performance confirm many of the positive trends noted from the first to the second assessment in *Reading in America* (1976).

Table 2 presents the national mean percentages of correct responses for 9-year-olds and shows the changes in mean percentages over nine years. Also shown in the table are the national mean percentages of correct responses with the changes for the three categories of reading exercises: literal comprehension, inferential comprehension and reference skills.

The increase in the change in percentages of 9-year-olds responding correctly to reading exercises from the first to the third assessment has more than tripled.

TABLE 2. National Mean Percentages and Changes in Correct Responses for 9-Year-Olds in Three Reading Assessments#

	Years			Changes		
	1971	1975	1980	1971-75	1975-80	1971-80
Total reading exercises (57)	64.0%	65.2%	67.9%	1.3*	2.6*	3.9*
Literal comprehension§	85.7	86.8	89.6	1.0	2.8*	3.9*
Inferential comprehension	80.5	81.4	83.9	0.9	2.5*	3.5*
Reference skills	64.8	67.0	69.6	2.3*	2.6*	4.8*

#Figures may not total due to rounding.
**Asterisk indicates significant change in performance between assessments.*
§There were 58 exercises in the second and third assessments, and 9-year-olds were administered three additional exercises designed to measure grammar and sentence-ordering skills.

Note: Appendix A contains tables displaying the national and group mean percentages and changes in mean percentages for the three reading assessments. Data displayed in these tables are the basis of all tables and exhibits included in the body of this report.

CHAPTER 3

THE READING PERFORMANCE OF 13-YEAR-OLDS: NATIONAL AND GROUP RESULTS

National Results

Table 4 displays the mean percentage of correct responses and the mean changes in performance for the nation on all the exercises administered to 13-year-olds by categories of exercises. Performance results nationally indicate no significant changes on the total pool (71) of change exercises over the three reading assessments.

In literal comprehension, 13-year-olds showed a significant increase of 1.6 percentage points from the first to the third assessment. Their performance on inferential comprehension remained relatively stable from the first to the third assessment, with no significant gains or losses. Thirteen-year-olds declined significantly, 1.7%, between the first and second assessments on reference skills exercises, but gained 2.6% in this area between the second and third assessments.

TABLE 4. National Mean Percentages and Changes in Correct Responses for 13-Year-Olds in Three Reading Assessments[a]

	Years			Changes		
	1970	1974	1979	1970-74	1974-79	1970-79
Total reading exercises (71)	60.0%	59.9%	60.8%	-0.1	0.9	0.8
Literal comprehension	61.1	61.8	62.7	0.7	0.9	1.6*
Inferential comprehension	56.1	55.3	55.5	-0.8	0.2	-0.6
Reference skills	65.8	64.1	66.7	-1.7*	2.6*	0.9

[a]Figures may not total due to rounding.
**Asterisk indicates significant change in performance between assessments.*

Following are examples of exercises used to measure literal and inferential comprehension and reference skills for this age group. Generally, the results on these single exercises are similar to those found for the total pool.

The "Magic Trick" exercise is an example of a typical literal comprehension exercise.

Magic Trick

Read the passage and answer the questions which follow it.

A favorite trick of magicians is to appear to pick articles and objects from the air. Here is a

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CHAPTER 4

THE READING PERFORMANCE OF 17-YEAR-OLDS: NATIONAL AND GROUP RESULTS

National Results

Table 6 shows the mean percentage of correct responses and the mean changes in performance for the nation on the total pool of exercises administered to 17-year-olds in school in three national assessments. No significant changes in performance occurred at the national level on the total number of exercises.

This table also indicates performance results for the nation by categories of reading exercises. While performance of 17-year-olds remained at the same level in literal comprehension and reference skills, it declined significantly (2.1%) from the first to the third assessment on the inferential comprehension exercises.

TABLE 6. National Mean Percentages and Changes in Correct Responses for In-School 17-Year-Olds in Three Reading Assessments#

	Years			Changes		
	1971	1975	1980	1971-75	1975-80	1971-80
Total reading exercises (71)	66.9%	69.0%	68.2%	0.0	-0.8	-0.7
Literal comprehension	72.2	72.7	72.0	0.5	-0.7	-0.2
Inferential comprehension	64.2	63.3	62.1	-0.9	-1.2	-2.1*
Reference skills	69.4	70.1	70.2	0.6	0.2	0.8

#Figures may not total due to rounding.
**Asterisk indicates significant change in performance between assessments.*

The three exercises below are examples of those designed to measure literal and inferential comprehension and reference skills, respectively.

The first exercise was administered to 13- and 17-year-olds and was designed to measure literal comprehension. For those interested, results are presented for both age groups, and this exercise is one of those included in the summary of results in Appendix B.

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Senator STAFFORD. Thank you very much, Dr. Long, for joining us and for helping us with the problem that the subcommittee faces. We appreciate it, and I do have one question here. Do you feel that the educational research program in title III of the American Defense Education Act would have the intended impact on effective education in mathematics, sciences, foreign languages, and technology?

Dr. LONG. Title III presupposes the National Institute of Education being able to implement such a change. One of the serious problems with the research agenda of the National Institute has been the fact that it has not been able to take its basic research in the cognitive sciences and apply it to the classroom. This bridge is lacking. The benefit of a program like ADEA would create a linkage between the two. However, unless NIE or its successor agencies have people on it, making decisions, who know how to take research and apply it and then disseminate it, I feel that we will still be stuck in the same position we are today, with a wide knowledge base that is reflected in a publication like this, but an inadequate ability to distribute it to the thousands of teachers across the land.

Senator STAFFORD. Thank you very much, Dr. Long.

Senator Dodd, do you have any questions?

Senator DODD. Thank you very much, Mr. Chairman.

I should have noted earlier to Mary Futrell, that I have some questions which are in writing, and if possible I would just like to submit them and have you respond to them.

And again, Mr. Chairman, I mentioned how grateful I am, and I know all of us are to you for holding this hearing. It is my intention—and I held up for today to have the benefit of this testimony—is to introduce a companion bill to Congressman Hawkins' in the House: the SERA. This bill is comparable to ADEA, and my intent is to propose such a piece of legislation shortly, hopefully by September. But before doing so, I want to have the benefit of the wisdom of my chairman here and a few others on this committee as to what form this ought to take. I do not believe in just introducing a bill for the sake of introducing a bill. And hopefully, maybe before we leave here for the August 1 recess, we will be able to submit a bill to the various offices around here, so they will have the benefit of the month of August while the members are away to take a good, hard look at it and come back in September with the benefit of that input.

I should have made note of that, earlier, Mr. Chairman, but I thank you, and I thank you, Dr. Long, for your testimony.

Senator STAFFORD. Thank you, Senator Dodd.

With that, I think the business of the subcommittee has been completed for today; so the committee will stand adjourned.

[Whereupon, at 3:20 p.m. the subcommittee was adjourned.]

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